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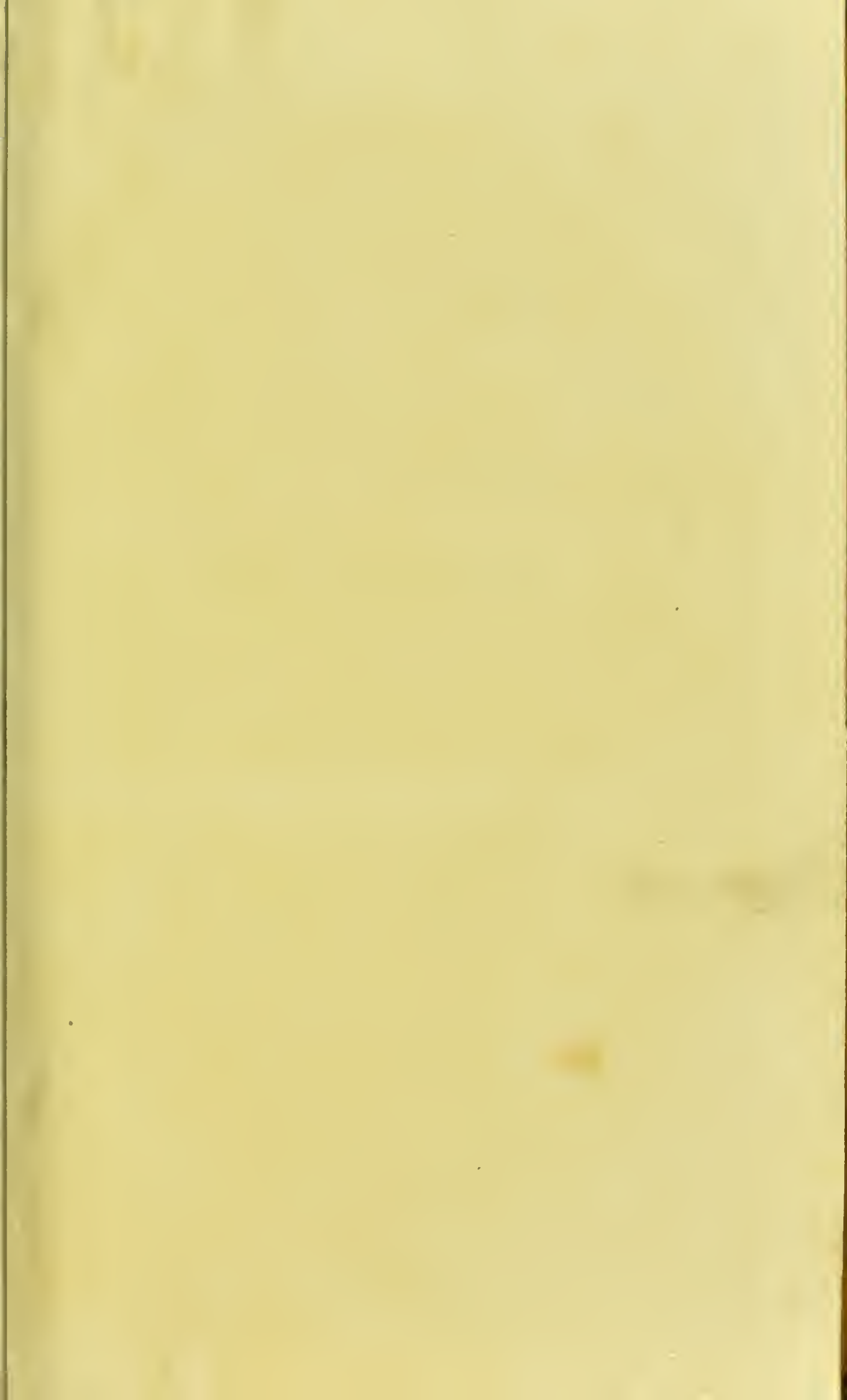
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THE LANGUAGE

OF

BOTANY.

THE
LANGUAGE OF BOTANY:

BEING
A DICTIONARY
OF THE

TERMS MADE USE OF IN THAT SCIENCE.

PRINCIPALLY BY LINNEUS:

WITH
FAMILIAR EXPLANATIONS,

AND AN ATTEMPT TO ESTABLISH
SIGNIFICANT ENGLISH TERMS.

THE WHOLE INTERSPERSED WITH
CRITICAL REMARKS.

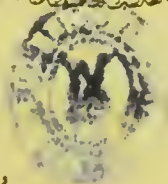
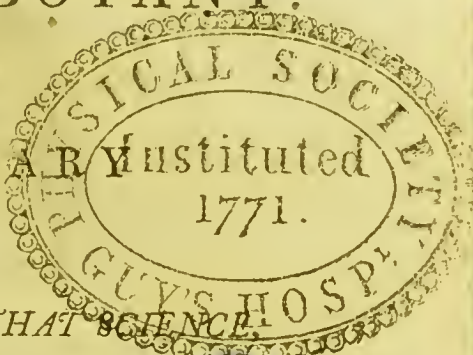
THE THIRD EDITION, CORRECTED AND ENLARGED.

By THOMAS MARTYN, B.D. F.R.S.
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CAMBRIDGE.

L O N D O N :

PRINTED BY T. BENSLEY, BOLT COURT,
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1807





TO

JAMES EDWARD SMITH,

DOCTOR OF PHYSIC, FELLOW OF THE ROYAL SOCIETY,
PRESIDENT OF THE LINNEAN SOCIETY,
ETC. ETC.

DEAR SIR,

THE following GLOSSARY would probably never have appeared in print, had it not been for the favourable reception which an imperfect essay on the same subject met with from the Society over which you so ably preside; and the encouragement which I had to proceed from some conversations that have passed between us; wherein I found that you did me the honour to approve of my principles in
general;

general; and that we differed as little in particulars as two men who think for themselves can well do on any subject, that branches out into such a variety as this.

To you, who know so well the difficulties that attend on accuracy and precision, there needs no apology for the errors and imperfections of the work that now presumes to claim your protection. The great and extensive task which I am now bringing to a period, has not left me leisure to use the file: and the subject will probably continue in its present rude state, till you, who have obliged the public with a handsome and correct edition of the most elegant among our great Master's works, shall find time to gratify them still farther, with an enlarged and corrected edition of his

Philo-

Philosophia Botanica; which is certainly one of the most useful of them, and may be considered as the corner stone of all the rest.

You, Dear Sir, are happy in the praises and good wishes of every one who has occasion to consult any part of the Linnean Collections, which so fortunately for the public have fallen into your hands: and I may venture to say, that my brethren of the Linnean Society will heartily concur with me in my good wishes for your health and prosperity, as well as for your long continuance in a station which gives you the opportunity of rendering important services to Natural History.

I flatter myself that you will take in good part this public testimony
which

which a veteran in our Science bears to
your worth and abilities: and that you
will permit me to subscribe myself,

Your very sincere Friend,

And

Obedient humble Servant,

THOMAS MARTYN.

FRITH-STREET,
February 8, 1796.

P R E F A C E.

MY attention was first called to consider the LANGUAGE of BOTANY, very soon after Linneus had published his Fundamental Treatise*. At that time I was a pupil in the school of our great countryman Ray. But the rich vein of knowledge, the profoundness and precision which I remarked every where in the *Philosophia Botanica*, withdrew me from my first master, and I became a decided convert to that system of Botany which has been since generally received.

Being then engaged in academical studies, and afterwards in those of the profession

* In the year 1751.

which I had determined to adopt, Botany was rather the amusement of leisure hours than the object of serious pursuit, till the institution of a Botanic Garden at Cambridge by Dr. Walker, and the desire which my father expressed to resign a chair which his age and infirmities rendered him unable to fill with satisfaction to himself, roused my attention a second time to a favourite pursuit.

Having been appointed by the unanimous voice of the University of Cambridge to the Professorship of Botany; and being soon after nominated by Dr. Walker, the founder of the new garden, his first Lecturer; I had the felicity of taking the lead in introducing the Linnean system and language to my countrymen, by a course of public lectures*. They were at that time entirely new to the University, and very little known or attended to in other parts of the kingdom, except at Edinburgh, by the laudable efforts of the late Dr. Hope.

* In the year 1762.

The institution of the Linnean Society; the avidity with which the study of Botany has been lately pursued by many in every rank and description of persons; the necessity I was under to find terms by which to express myself in my Letters on Botany, and especially in the great work which I am now finishing; have all conspired to excite my attention a third time to Botanical Language, and particularly to the mode which seems best for us to adopt when we write or speak of the science in our native tongue.

So long as Botany continued to be studied only among those who had received a learned education; the original terms of Linneus, derived from the Greek or Latin, served all the purposes of general intercourse. But when it became universally adopted, a Vernacular Language would of course be gradually formed; and if it were to be left to chance, or the choice of the ignorant, many absurdities and barbarisms would be introduced, debasing our sterling English. This it has been my wish to avoid; and I

now renew the attempt which I made some time since * to fix our native Botanical Language on certain and reasonable principles, conformable to general analogy. Had not this been my particular view, and had I been satisfied with what has been already done by several learned and ingenious writers, I should certainly not have obtruded my ideas upon the public, after such a multitude of elementary books had been printed: and even now the errors, omissions, and defects of various kinds, which those who are skilled in Philological Botany will easily detect in this little volume, require an apology. I must request the public therefore to consider it as a mere attempt, that may hereafter be improved into something more worthy of their regard, if learned Botanists and Philologists will condescend to consider the subject more deeply.

I am aware that many will say, You give too much importance to these laborious

* Dissertation printed in vol. I. of the Transactions of the Linnean Society.

trifles. But if they be such, they lead not to any serious mischief; and so long as the weightier matters of science are not neglected, there can be no harm in working up and polishing the minuter parts, so that the ornaments may not disgrace the edifice.

The indolent I am sensible will shrink from this odious assemblage of terms: but the indolent must be contented to lie under the disgrace of ignorance, or at most to skim very lightly the surface of knowledge.

Many terms are indispensably necessary in the Science of Nature, where the objects that present themselves to our consideration are so numerous. The question therefore is not, whether we shall have terms or no, but in what manner they should be constructed so as to answer the great purpose of receiving and communicating knowledge most effectually? Now we have been long in possession of a precise and significant language invented by Linneus, generally

B 3 adopted

adopted by the learned of every country in Europe, and received in great part into the vernacular tongues of several. Can we do better therefore than to keep as close as possible to this, and to adopt the Linnean terms themselves, so far as the nature and structure of the English language will permit, and whenever we can do it without violating the laws of grammar or common sense? We shall thus have all the advantage which is derived from speaking and writing one universal language: whereas if we set about finding equivalent terms in English, these will require as much explanation as the others, and will be equally difficult to the student, without having possession or prescription to plead. Thus shall we become unintelligible to every other nation, without being more intelligible among ourselves.

Laying it down therefore as a first principle, that we ought to adhere as closely as possible to the Linnean language, it will be found that the number of terms, purely English,

English, occurring in the Botanical Glossary, which is now offered to the public, is comparatively small. That this may be clearly seen, and that persons may judge for themselves how far they would choose to depart from the original terms, I have put together at the bottom of the page those which are translated or equivalent *. A perfect agreement

* Arched or Vaulted. <i>For-</i>	Chaff. <i>Palea.</i>
<i>nicatus.</i>	Chinked. <i>Rimosus.</i>
Awn. <i>Arista.</i>	Clasper or Tendril. <i>Cirrus.</i>
Banner or Standard. <i>Vex-</i>	Clasping or Stem-Clasping.
<i>illum.</i>	<i>Amplexicaulis.</i>
Barb. <i>Glochis.</i>	Claw. <i>Unguis.</i>
Bark, outer. <i>Cortex.</i>	Cleft. <i>Fissus.</i>
—, inner. <i>Liber.</i>	Club-shaped. <i>Clavatus.</i>
Barren. <i>Sterilis.</i>	Clustered or Crowded.
Beaked. <i>Rostratus.</i>	<i>Conferus.</i>
Beard. <i>Barba.</i>	Cobwebbed. <i>Arachnoideus.</i>
Bellying. <i>Ventricosus.</i>	Coiled. <i>Tortilis, Tortus.</i>
Berry. <i>Bacca.</i>	Columnar. <i>Teres.</i>
Boat-shaped. <i>Navicularis.</i>	Condensed. <i>Coarctatus.</i>
Bough or Branch. <i>Ramus.</i>	Converging. <i>Connivens.</i>
Bowed. <i>Arcuatus.</i>	Cotton, nap or flocks. <i>To-</i>
Bristle. <i>Seta.</i>	<i>mentum.</i>
Bud. <i>Gemma.</i>	Creeping. <i>Repens.</i>
Cell. <i>Loculamentum.</i>	Crescent-shaped. <i>Lunatus.</i>
	Cross-

ment on this subject is not to be expected, nor is it of any great consequence; but I

Cross-wise. <i>Cruciatim</i> .	Headed. <i>Capitatus</i> .
Curled. <i>Crippus</i> .	Heaped. <i>Congestus</i> .
Dotted. <i>Punctatus</i> .	Heart. <i>Corculum</i> .
Double. <i>Geminus</i> .	Helmet. <i>Galea</i> .
Doubled. <i>Duplicatus</i> .	Hoary. <i>Canus, Incanus</i> .
Down. <i>Pappus</i> .	Hollow. <i>Cavus</i> .
Drooping. <i>Cernuus</i> .	Hook. <i>Hamus</i> .
Eared. <i>Auritus</i> .	Horn. <i>Cornu</i> .
Evergreen. <i>Sempervirens</i> .	Jag. <i>Lacinia</i> .
Eye. <i>Hilum</i> .	Jaws or Throat. <i>Faux</i> .
Flat. <i>Planus</i> .	Jointed. <i>Articulatus</i> .
Flatted. <i>Compressus</i> .	Keel. <i>Carina</i> .
Fleshy. <i>Carnosus</i> .	Knotted. <i>Nodosus</i> .
Floating. <i>Natans</i> .	Latticed. <i>Cancellatus</i> .
Flower. <i>Flos</i> .	Leaf. <i>Folium</i> .
Fringed. <i>Fimbriatus</i> .	Lip. <i>Labium</i> .
Funnel-shaped. <i>Infundibuliformis</i> .	Male. <i>Mas. s. Masculus</i> .
Furrowed or Grooved. <i>Sulcatus</i> .	Manifold. <i>Multiplex</i> .
Gape. <i>Rictus</i> .	Marrow or pith. <i>Medulla</i> .
Gaping. <i>Hians</i> .	Mouth. <i>Os</i> .
Gashed. <i>Incisus</i> .	Naked. <i>Nudus</i> .
Hair. <i>Pilus</i> .	Neck. <i>Collum</i> .
Halved. <i>Dimidiatus</i> .	Nestling. <i>Nidulans</i> .
Hanging down. <i>Dependens</i> .	Nodding. <i>Nutans</i> .
Head. <i>Capitulum</i> .	Pair. <i>Jugum</i> .
	Partition. <i>Dissepimentum</i> .
	Permanent. <i>Persistens</i> .
	Pitcher-

have subjoined a list of doubtful terms, many of which may perhaps be used indifferently at discretion*. The learned will of course

Pitcher-shaped. <i>Urceolatus.</i>	Smooth. <i>Glaber.</i>
Pitted. <i>Locunofus.</i>	Spur. <i>Calcar.</i>
Plaited. <i>Plicatus.</i>	Stalk or Stem. <i>Caulis.</i>
Prickle. <i>Aculeus.</i>	Stiff. <i>Rigidus.</i>
Protruded. <i>Exsertus.</i>	Stings. <i>Stimuli.</i>
Punched. <i>Pertusus.</i>	Straight. <i>Rectus.</i>
Rib. <i>Costa.</i>	Sucker. <i>Stolo.</i>
Root. <i>Radix.</i>	Tail. <i>Cauda.</i>
Rough. <i>Asper.</i>	Tapered. <i>Attenuatus.</i>
Runner. <i>Reptans flagellum.</i>	Toothed. <i>Dentatus.</i>
Salver-shaped. <i>Hypocrateriformis.</i>	Tree. <i>Arbor.</i>
Sap. <i>Succus, Alburnum.</i>	Twin. <i>Didymus.</i>
Scaly. <i>Squamofus.</i>	Twining. <i>Volubilis.</i>
Scattered. <i>Sparfus.</i>	Twisted, or Coiled. <i>Tortus, Tortilis, Tortuosus.</i>
Scored. <i>Exaratus.</i>	Veil. <i>Calyptra.</i>
Seed. <i>Semen.</i>	Vessels. <i>Vasa.</i>
Sheath. <i>Vagina.</i>	Undershruh. <i>Suffrutex.</i>
Shrivelling. <i>Marcescens.</i>	Wing. <i>Ala.</i>
Shrub. <i>Frutex.</i>	Woody. <i>Lignosus.</i>
Sickle-shaped. <i>Falcatus.</i>	Wool. <i>Lana.</i>
Silky. <i>Sericeus.</i>	Wrinkled. <i>Rugosus.</i>
	Wriathed. <i>Contortuplicatus.</i>

* Awl-shaped or Subulate. Bell-shaped or Campanulate.
Bitten or Præmorfe.

Bladder

manifest a predilection for the Greek or Latin terms, and the English Botanist for the other. Some of our terms approach so near to their original, that they can scarcely be considered as English *.

Bladder or Vesicle.	Kidney-shaped or Reni-
Blistered or Bullate.	form.
Blunt or Obtuse.	Kneed, Knee-jointed, or
Border, brim, or limb.	Geniculate.
<i>Limbus.</i>	Mule or Hybrid.
Bright or Lucid.	Ragged or Squarrose.
Bundle or Fascicle.	Rugged or Scabrous.
Clammy or Viscid.	Sabre-shaped or Acinaci-
Climbing or Scandent.	form.
Coated or Tunicated.	Shaggy or Hirsute.
Coriaceous or Leathery.	Sharp or Acute.
Cottony, downy, nappy, or	Thorn or Spine.
Tomentose.	Tongue-shaped or Lingui-
Cowled or Cucullate.	form.
Crenate or Notched.	Top-shaped or Turbinate.
Dagger pointed, or Mucro-	Trailing or Procumbent.
nate.	Warted or Verrucose.
Erect or Upright.	Waved or Undulated.
Feathered or Plumose.	Wedge-shaped or Cunei-
Gnawed or Erofe.	form.
Heart-shaped or Cordate.	Wheel shaped or Rotate.
Hoofed or Ungulate.	Whorl or Verticil.

* Such as,

Crested from Cristatus.	Crown from Corona.
	Entire

That we must depart sometimes from the Linnean language I readily allow: but the cases are rare, and the instances under each case are not many.—Thus, when we have a significant English term, which has been in long and general use, it certainly ought to keep its place: but the original terms of the science in our language, which have received the sanction of the public, are very few*.—In the case also of very long words, giving too great an air of pedantry to the language, it may perhaps be better to substitute English compounds, which may be used with considerable success †.—When any Latin terms

Entire from Integer.

Ray from Radius.

Fork from Furca.

Round from Rotundus.

Fruit from Fructus.

Unarmed from Inermis.

Nut from Nux.

* Seed. Leaf. Stalk. Flower. Fruit. Cell for *Loculamentum*. Partition for *Dissepimentum*. Seed-vessel for *Pericarpium*.—See the lists in the former notes. Grew's terms; as Empalement, Chive, Semet, Pointell, Ovary, Knob or Button, &c. have never met with a general reception.

† As Bell-shaped for *Campaniformis*. Funnel-shaped for

have already an appropriate sense in English, it avoids confusion to translate them, rather than to use the originals themselves*. So, likewise, when they do not assimilate kindly to our language, the same rule is to be observed†.

These exceptions being admitted, I hope to be excused for repeating my opinion—that the advantage of Botany will most effectually be consulted, by retaining the Linnean terms, whenever there is no cogent reason to the contrary. And I must add, that in order to avoid confusion, the greatest caution is necessary, when we would substitute equivalent terms for the originals‡.

Many particular observations, confirming the theory here laid down, will be found for *infundibuliformis*. Salver-shaped for *Hypocrateriformis*.

* As in *Adversus*, *Exasperatus*, *Strictus*.

† As in *Teres*, *Amplexicaulis*, *Hirtus*.

‡ As in rendering *Deciduus* and *Caducus* by *falling*; *Plumosus* by *feathery*; and *Pinnatus* by *feathered*. *Dichotomus* by *forked*, &c.

scattered

scattered here and there in the Glossary. It remains therefore only to express my wish, that the structure and genius of our native language may be attended to, not only in the formation of the terms themselves, but in their terminations and plurals, their compounds and derivatives. Not to detain the reader however any longer, I beg leave to refer him, for this part of the subject, to my Essay in the Linnean Transactions, and to the method which I have pursued in the conduct of this work*.

* That my meaning however may be clearly understood, I here put down a few instances to illustrate it. With respect to Plurals, *Nectarium* should make *Nectariums*, not *Nectaria*. *Nectary* should make *Nectaries*. *Pericarpium*, *Pericarpiums*. *Corolla*, *Corollas*. *Anthera*, *Antheras*. *Stamen*, *Stamens*; not *Stamina*; which is sometimes taken for a singular, as *Stipula* is for a plural.—With respect to Derivatives and Compounds, they ought to follow the analogy of their Roots. Thus, if we adopt the English terms Prickle and Thorn, we must say *Prickly* and *Thorny*, not *Aculeate* and *Spinose*. If for *Loculamentum* we put *Cell*, we must use *Two-celled*, not *bilocular*. If for *Bacca* we put *Berry*, we must write *Berry-bearing*, not *bacciferous*. *Two-leaved*,
Many-

The scientific mode of arrangement, which Linneus has adopted, and from him most of his followers, has the advantages of elegance and of presenting kindred terms to the Reader at one view. I have however preferred the alphabetical form for convenience, and because a word that is not understood is thus most readily detected,—A book of this sort, in order to be perfect, should contain a complete scientific arrangement, accompanied by a copious explanatory index or glossary; something in the manner of Mr. Lee's second and following editions of his Introduction. But the scientific arrangements are already numerous: the task of giving one more to the public would have interrupted too much the more important pursuits in which I am at present engaged; and my work would have risen into a bulk too great for the use to which I had destined it.

Many-Leaved will follow leaf. *Two-flowered*, *Many-flowered* will follow Flower. Root will have *Root leaf*, not radical leaf.

This

This Glossary, such as it is, will be found to contain the terms of Linneus's *Philosophia Botanica*, *Termina Botanici*, and *Delineatio Plantæ*; with the addition of some which are used in the *Species Plantarum* and *Systema Vegetabilium*, but are not explained or even registered in his fundamental or elementary treatises. They are always accompanied by an explanation in English, and frequently by one in Latin also; in order that the unlearned may understand, and the learned judge for themselves concerning their meaning, where there appears to be any shadow of a difficulty. The derivation of the term is commonly added, where it seems necessary, or could be given with any degree of satisfaction: sometimes a variety of derivations is set down, with a view of shewing the uncertainty that we find in this branch of our philological enquiries. Lastly, instances are subjoined, where they were at hand, of the most known plants, best adapted to illustrate the terms and their explanations. When the English word differs from the Latin in any thing more than

than the termination, both will be found in their proper places, mutually referring to each other; and each frequently accompanied with an explanation in its proper language. I have sometimes hazarded opinions and criticisms, not with any view of dogmatizing, but with the hope of being corrected, or better informed.

That the Reader may know where to apply for information, in case he should not be satisfied with what is here set before him, I shall conclude this Preface with a List of the principal fundamental Treatises on Botanical Language that have been hitherto published, and have been seen or consulted by me.

Linneus's celebrated elementary work, first published at Stockholm in 1751, is the foundation of all the rest. It is entitled, *Philosophia Botanica, in qua explicantur Fundamenta Botanica, cum definitionibus partium, exemplis terminorum, observationibus variorum, adjectis figuris æneis*. It contains the Institutes

tutes of the Science of Botany, and has eleven plates, ten of which are explanatory of leaves, stalks, fulcres, roots, fructification, &c. There are several editions of this valuable book. It was published in the same year at Amsterdam; at Vienna in 1755, 1763 and 1770; at Berlin in 1779, by Gleditsch; and at the same place in 1790, by Willdenow*.

A list of Botanical Terms without explanations, under the title of *Delineatio Plantæ*, was prefixed to the twelfth and thirteenth editions of *Systema Vegetabilium*, 1767 and 1774; and has been continued in the fourteenth edition of the same work by Murray, 1784; and in the thirteenth edition of *Systema Naturæ*, by Gmelin, in 1791.

This list is preceded by a general explanation of the principal parts of plants, and

* See Dr. Pulteney's General View of the Writings of Linneus, p. 46—50.

some circumstances relative to their physiology, under the title of *Regnum Vegetabile*.

But the first appearance of a complete list of Botanical Terms, accompanied with explanations, and detached from other matter, was in the sixth volume of *Amœnitates Academicæ*, printed in 1764. It is entitled *Termini Botanici*; and is a thesis read by J. Elmgren, in 1762.—This was reprinted here, with additions, in 1779, by Dr. Rotheram, under the title of *Caroli a Linnè Termini Botanici, definitionibus pluribus aucti; atque Systematis Sexualis Explicatio. Opere Joh. Rotheram, jun. M. D. Novicastri, 1779, 12mo.*

Dr. Giseke also, of Hamburg, has printed the same work, with the addition of other matters, under the title of *Termini Botanici Classium Methodi Sexualis Generumque Libertarum Characteres Compendiosi. Recensiti cum interpretatione Germanica definitionum Terminorum, curavit Paulus Gisekeus, 1786, 8vo.*

M. D. &c.—*Editioni huic alteri accesserunt Fragmenta Ordinum Naturalium Linnæi, Nomina Germanica Planeri Generum, Gallica & Anglica Terminorum, & Indices.* Hamburgi, 1787, 8vo.

This volume contains Linneus's Preface to his *Genera Plantarum*—*Clavis Systematis Sexualis* both in Latin and German, with an explanation of the Classes—*Regnum Vegetabile*—*Delineatio Plantæ*, with explanations from *Termini Botanici*, and additions. The whole of this is both in Latin and German.—An alphabetical Index of Terms in Latin, French, and English: the last very imperfect, and full of mistakes.—A German Index.—Part of the second contains compendious Characters of Linneus's Genera, such as are placed at the head of each Class in *Systema Vegetabilium*, from Murray's edition; with the German names, and a Latin and German Index.—And, *Ordines Naturales*, from the sixth edition of Linneus's *Genera Plantarum*; with the new Genera added in their proper places.—I

have not seen the first edition of this work.
—When I quote *Delin. Pl.* in the following Glossary, it is from this book of Giseke's.

Mr. Hudson has also prefixed *Termini Botanici* to the second edition of his *Flora Anglica*, in 1778.—And the Lichfield Society have given it, together with the *Regnum Vegetabile* and *Delineatio Plantæ*, in English, at the head of their translation of Linneus's *Vegetable System*, published in 1783; accompanied with many excellent general philological remarks in the Preface.

The Elements of Botany appeared first in an English dress in the introductions of the late celebrated Mr. Philip Miller, and of Mr. James Lee, nurseryman, at the Vineyard, Hammer-smith, in the year 1760. The former annexed to the late editions of his Gardener's Kalendar, was short and imperfect. But the latter contains a full explanation of Linneus's terms. It is
entitled

entitled—*An Introduction to Botany. Containing an Explanation of the Theory of that Science; extracted from the Works of Dr. Linneus; with twelve copper-plates, two explanatory tables, &c.* To the second edition of 1765 was added a Glossary. The fifth and last edition was published in 1794, 8vo.

This work however not being a translation of Linneus's fundamental treatise, Mr. Rose undertook this task, which had long been much desired by English Botanists unacquainted with the learned languages. He published it under the title of *The Elements of Botany: containing the History of the Science, with accurate Definitions of all the Terms of Art, exemplified in eleven copper-plates; the Theory of Vegetables; the Scientific Arrangement of Plants, and Names used in Botany; Rules concerning the general History, Virtues and Uses of Plants. Being a translation of the Philosophia Botanica, and other treatises of the celebrated Linneus. To which is added, an Appendix, wherein are described some Plants lately found in*

C 3. Norfolk

Norfolk and Suffolk, illustrated with three additional copper-plates, all taken from the life. By Hugh Rose, Apothecary, London, 1785, 8vo.

A few years after Mr. Lee's Introduction was published, Dr. Berkenhout gave the Linnean Terms, with an explanation, in the form of a Dictionary, entitled *Clavis Anglica Linguae Botanicæ: or a Botanical Lexicon; in which the Terms of Botany, particularly those occurring in the works of Linneus, and other modern writers, are applied, derived, explained, contrasted and exemplified. By John Berkenhout, M. D. Lond. 1764.*

This work probably occasioned the addition of an alphabetical Glossary to Mr. Lee's Introduction, the year following. The public were so well satisfied with Dr. Berkenhout's performance, that a second edition of it was printed in 1789.

Dr. Colin Milne also is the Author of an elementary book in the same form, but on a plan

plan much more extensive, as may be seen from the Title, which runs as follows—*A Botanical Dictionary: or Elements of Systematic and Philosophical Botany. Containing Descriptions of the Parts of Plants—an Explanation of the Scientific Terms used by Morison, Ray, Tournefort, Linneus, and other eminent Botanists—A brief Analysis of the principal Systems in Botany—A critical Enquiry into the Merits and Defects of the Linnean Method of Arrangement, and Distribution of the Genera—Descriptions of the various Tribes, or natural Families of Plants, their Habit and Structure, Virtues, sensible Qualities, and æconomical Uses—An impartial Examination of the Doctrine of the Sex of Plants—with a Discussion of several curious Questions in the Vegetable Oeconomy, connected with Gardening. The whole forming a Complete System of Botanical Knowledge.* By Colin Milne, LL. D.—The first edition in 1770; the second in 1778; Lond. 8vo.

In the *Universal Botanist*, &c. published by Richard Weston, Esq. in 1770, there is

a copious Botanical Glossary. As there is also in the second edition of Dr. Withering's *Botanical Arrangements*, printed in 1792. Mr. Stephen Robson has prefixed the *Principles of Botany* to his *British Flora*, York, 1777, 8vo.

Lastly, there is *A Short and Easy Introduction to Scientific and Philosophic Botany*, By Samuel Saunders, Lond. 1792, small octavo.—Neatly printed, in a little compass; well adapted to such as do not wish to enter into the depths of the Science.

It would carry me too far, were I to attempt enumerating the Elementary Books which have been published in Foreign Countries, and in various Languages. I shall content myself therefore with barely mentioning those which follow :

Geo. Chr. Oeder Elementa Botanicae—pars 1, 1764.—pars 2. 1766. *Hafn.* 8vo.

Joan.

*Joan. Antonii Scopoli Fundamenta Botanica,
Viennæ, 1786, 8vo.*

*Joan. Danielis Leers Nomenclator Linneanus,
seu Explicatio Terminorum Technicorum
Ordine Alphabetico exhibita—cum Flora
Herbornensi. Berol. 1789, 8vo.*

There remains only to request the indulgence of the Public, for adding one more to the number of Elementary Books already before them,

THE

THE LANGUAGE

OF

BOTANY.

A B

A C

ABBREVIATED perianth (*Abbreviatum perianthium*). Shorter than the tube of the corolla: as in *Pulmonaria maritima*.

ABORTIVE flower (*Abortiens flos*). Falling off without producing fruit. See *Barren*.

ABRUPT leaf. A term used only in pinnate leaves, which are said to be abruptly pinnate (*abruptè pinnata*), when they have neither leaflet (*foliolum*) nor tendril or clasper (*cirrus*) at the end.

ACAULIS. Stemless; without stem or stalk.

ACEROSE leaf (*Acerosum folium*). Linear and permanent; as in *Pine*, *Fir*, *Juniper*,

A C

per, Yew. Lin. Philos. Bot. 42.—In form of a needle, usually inserted at the base into the branch by articulation, as in the cone-bearing trees, p. 219.

ACICULAR (*Aciculāris*). Shaped like a small needle. The trivial name of a small sharp-pointed *Scirpus*.

ACINACIFORM leaf (*Folium acinacifōrme*),
Fleshy, compressed; one edge convex and sharp, the other straighter and thicker; resembling a sabre, falchion or scymitar.
As in *Mesembryanthemum acinaciforme*.

ACINI. Granulations. *With.*—Linneus appropriates this term to the distinct component parts of the fruit in Mulberry, Blackberry and Raspberry. These fruits, with many others, are commonly called Berries; but, not answering to Linneus's definition, may have the name of *Compound* or *Spurious Berries*. See *Berry*.

ACINUS is used by Columella in the same sense with *Uva*, for a single Grape. It
was

was also applied to the single berry of Ivy and others which grow in clusters. *Bacca* is used for the Berry which grows singly, as *Olea* or Olive, &c. And *Uva* is of more extensive sense than *Acinus*; being put for a bunch of grapes, and even the vine itself.

ACOTYLEDONOUS plants (*Plantæ acotyledones*). Without cotyledons or lobes to the seed; and consequently not having any feminal leaves; as in the class *Cryptogamia*.

The distinction of Vegetables into *Acotyledones*, *Monocotyledones*, *Dicotyledones* and *Polycotyledones*; or into such as have no lobes, one lobe, two lobes, or several, in a seed, has been long made, and is the basis of Jussieu's Natural Arrangement.

ACULEATUS. Prickly.

ACULEUS (a Prickle). *Mucro pungens, cortici tantum affixus*. Lin. See Prickle.

ACUMINATE or sharp-pointed (*Acuminatus*).

tus). Ending in a subulate or awl-shaped point. Frequent in leaves: in the calyx, as in *Itea*, &c.

ACUTE, sharp. *Acūtus*. Ending in an acute angle. Applied to leaves: and to the perianth, as in *Primula*, &c.

ADNATUS. Adnate, Adjoined, Adhering, fastened, fixed or growing to. As the offsets, or small bulbs, produced from the main bulb, and closely adjoining to it; in *Narcissus*, &c.—The leaf, adhering to the stem or branch by the surface or disk itself.—The petiole.—The stipule, fixed to the petiole, and opposed to *solutus*, loose, detached; as in *Rose*, *Bramble*, *Potentilla*, &c.—The Anther.—The style, adhering to the corolla, as in *Canna*.

Adpressus. See *Appressed*.

Ascendens. See *Ascending*

ADVERSUM folium (an Adverse leaf). The upper side turned to the south.

ÆQUALIS POLYGAMIA (Equal Polygamy).

The name of the first order in the class *Syngenesia* of Linneus's system, containing those compound flowers, which have all the florets hermaphrodite and alike.

ÆQUINOCTIALES *Vigiliæ*. See *Vigiliæ*.

ÆSTIVATIO (*Æstivation*.) The disposition of the petals within the floral gem or bud. This is, 1. *Convolute*, when the petals are rolled up like a scroll of paper. 2. *Imbricate* when they lie over each other like tiles on a roof. 3. *Conduplicate*, when they are doubled together at the midrib. 4. *Valvate* or *valved* (*valvata*), when as they are about to expand they are placed like the glumes in grasses. 5. *Unequally-valved*, when they differ in size.

AGGREGATE flower (*Aggregātus flos*, from *aggregare*, to assemble or collect together). That which has some part of the fructification common to several florets. Or, when several florets are so combined by the intervention of some part of the fructification,

A L

fructification, that taking away one of them destroys the uniformity of the whole. This common bond is either the Receptacle or the Calyx. The partial or component flower of the aggregate is called a *floscule* or *floret*.

There are seven kinds of aggregate flowers. 1. Umbellate or Umbelled. 2. Cymose or Cymed. 3. Compound. 4. Aggregate, properly so called, having a dilated receptacle, and the florets on peduncles: as *Scabious*, *Knautia*, *Teasel*, *Cephalanthus*, *Globularia*, *Leucadendron*, *Protea*, *Statice*, &c. 5. Amentaceous. 6. Glumose, as the grasses. 7. Spadiceous, as the Palms, also *Calla*, *Dracontium*, *Pothos*, *Arum*, *Zostera*.

Hence *Aggregatæ* is the name of the forty-eighth order of plants, in Linneus's Fragments of a Natural Arrangement, in *Philos. Bot.* containing such vegetables as have their flowers properly aggregate. See *Lin. Gen. ed.* 6. at the end.

A L

ALA. *Wing.* A membrane on the sides of a petiole or footstalk of a leaf; or attached to a seed or seed-vessel. **ALÆ.** The two side petals of a papilionaceous flower. See *Wings*. The angle formed by a branch with the stem, or by a leaf with the branch, was formerly expressed by this term; but it is now called the *Axilla* or *Axil*; which see.

Alātus. See *Winged*.

ALBUMEN. Used by Grew and Gærtner for the substance of the lobes of the seed; which corresponds with the white in an egg.

ALBURNUM. The soft white substance in trees, between the *liber* or inner bark and the wood, gradually acquiring solidity, and becoming genuine wood.—*Intermedia substantia libri & ligni.* Lin. Workmen call it the *Sap*.

ALGÆ (Flags). The second of the seven Families, and the eighth of the nine Tribes or Nations into which Linneus divides all

D vegetables.

vegetables. Comprehending such as have the root, leaves and stem all in one: as the *Lichens* or *Liverworts*, *Fuci* or *Seaweeds*, &c. See *Families* and *Nations*, or *Gentes*.

In Linneus's Artificial System, the *Algæ* occupy the third order of the class *Cryptogamia*. In his Fragments of a Natural Arrangement, at the end of *Genera Plantarum*, they make the fifty-seventh section, and in *Philosophia Botanica* the sixty-sixth.

ALTERNATE (*Alternus*) branches, leaves, peduncles or flowers: coming out one after or above another, in a regular succession or gradation. Contrasted with *opposite*.

Alternately-pinnate leaf. When the leaflets or component leaves are arranged alternately on each side of the common petiole.

ALVEOLATE (*Alveolatum* f. *favosum*) receptacle. Divided into open cells, like an honey-comb, with a seed lodged in each: as in *Onopordum*.

AMENT (*Amentum*). Called by others *Julus*,

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lus, Nucamentum, Catulus. In English, *Catkin*, from the French *Châton*, on account of its resemblance to a cat's tail.—*Amentum*; *gemmaeum, imbricatum, commune** : f. *Inflorescentia, ex receptaculo communi palaceo gemmaceo*†. A species of calyx, or rather of inflorescence, from a common, chaffy, gemmaceous receptacle; or, consisting of many chaffy scales, ranged along a stalk as slender as a thread, which is the common receptacle.—In the class *Monœcia*, the male flowers are frequently thus disposed; as in *hazle, birch, oak, walnut, sedge, &c.* also in *willow, poplar, &c.* in class *Diœcia*. The ament of the *willow* in vulgar language is called a *Palm*.

AMENTACEÆ. The name of the sixteenth order in Linneus's *Fragments of a Natural Method*, in *Philosophia Botanica*; and of the fiftieth at the end of *Genera Plantarum*: also, of a class in Tournefort's, Boerhaave's, and Royen's systems.

Amentaceous flowers; one species of the *Ag-*

* Lin. Regn. Veg.

† Lin. Philos. Botan.

gregate; borne or growing in an ament or catkin

AMPLEXICAULE *folium*; a Stem-clasping leaf, embracing, clasping or furrounding the stem by its base. Some leaves go only half round; these are called *Semiamplexicaulia*.

ANCEPS caulis (an ancipital stem). *Angulis duobus oppositis acutiusculus*. Two-edged or double-edged. Flatted, and rather sharp with two opposite angles. This is the common form of the ancipital stem, but it may have more angles than two; for Linneus gives not only *digonus* (caulis) but *trigonus*, *tetragonus*, *pentagonus*, and *polygonus*, as species of the *anceps*.

There is also an ancipital leaf, having two prominent longitudinal angles, with a convex disk; as in *Sisyrinchium*.

ANDROGYNOUS plant (*Planta androgyna*, from *ανηρ* and *γυνη*); bearing male and female flowers, on the same root, without any mixture of hermaphrodites. Such plants

A N

plants are to be found chiefly in the class *Monœcia*.

Androgynous flowers, having stamens or pistils only.

ANGIOSPERMIA. The name of the second order in the class *Didynamia* of the Linnean system. It is so called, because the seeds (σπέρματα) are enclosed in a vessel (αγγος) or capsule: in opposition to the first order, *Gymnospermia*, which has naked seeds.

ANGULAR stem (*Angulātus caulis*). Excavated or grooved longitudinally with more than two hollow angles. Called *triangular*, &c. (trigonus, &c.) according to the number of these angles:—*obtuse-angled* or *acute-angled*, from the measure of them.

Leaves also, and pericarps, running out into angles, are named *triangular*, &c. from the number of angles.

ANNUAL plant or root; perishing within the compass of a year: opposed to *biennial* or *perennial*. The stem of herbaceous plants, although the root be permanent, is annual, and thus is distinguished from that of trees and shrubs.

A N

ANOMALOUS, Irregular. Applied to plant, calyx, corolla, gem or bud, &c. In most of the old systems we find an anomalous or miscellaneous class.

ANTHER (*Ἀνθήρα*, *Anthēra*), *Apex* or *Chive* of Ray; *Capsula flaminis* of Malpighi. Summit, Semet, Pendent, or Tip, of Grew and other English writers.—*Pars floris gravida polline, quod matura dimittit* : or *fæta granulato polline, et hoc fovilla*. A part of the flower, big with pollen or farina which it emits or explodes when ripe; or, big with granulated pollen, and that with fovilla. Or, it may be defined to be a vessel destined to produce and emit a substance for the impregnation of the germ. It forms a part of the stamen, and is placed on the top of the filament.

I prefer Anther to Anthera, in English, because we thus avoid any dissension between the learned and unlearned respecting the pronunciation of the penultima, and the formation of the plural.

There is generally one anther to each filament :

A N

ment: in *Cucurbita*, however, there is one to three; and in the class *Syngenesia*, one to five filaments. In *Mercurialis* we find two, in *Fumaria* three, anthers to a filament; in *Bryonia*, five to three filaments; in *Theobroma*, five to each. In some flowers anthers are regularly wanting on one or more of the filaments; as in *Chelone* and *Martynia*, one—in *Pinguicula* and *Verbena*, two—in *Gratiola*, *Bignonia*, and some *Geraniums*, three—in *Curcuma*, four—in *Pentapetes* and other *Geraniums*, five. These are called barren filaments.

Anthers are *connected*

By the base, in most flowers.

By the top, in *Colchicum*.

By the side, in *Canna*, *Amomum*.

By the nectary, in *Costus*.

Their *situation* is

On the top of the filaments, in most flowers.

On the side, in *Paris* and *Asarum*.

On the pistil, in *Aristolochia*.

On the receptacle, in *Arum*, *Annona*.

They burst

On the side, in *Leucoium*, and most flowers.

At the top, in *Galanthus* and *Kiggelaria*.
From the base upwards, in *Epimedium* and
Leontice.

They are

{ Distinct, separate, not cohering. *Globularia*.

{ Connate, coalescent, united. *Solanum*,
Syngenesia.

{ Twin (*didymæ*), swelling outwards with
two knots. *Boerhaavia*, *Salicornia*,
Blitum, *Ammannia*, *Potamogeton*.

{ Upright, pointing upwards. *Salicornia*,
Ligustrum, *Olea*, *Chionanthus*, *Verbascum*,
Tulipa.

{ Incumbent, horizontal, and then versatile,
being fixed only in the middle so
as to move freely. *Gladiolus*, *Globularia*,
Dipsacus, *Scabiosa*, *Passiflora*.

{ Exsert, or standing out or beyond the
corolla, in some species of *Erica*.

{ Included, or enclosed within it. *Jasminum*,
Syringa, *Primula*.

Awned,

A N

- { Awned, ending in an awn, in some species of *Erica*.
- { Horned (*bicornes*), cloven at the tip, and the clefts spreading like horns, in some species of *Erica*, *Andromeda*, *Pyrola*.
- { Crested, terminating in a crest, in some species of *Erica*.

Their figure is

Oblong, in *Lilium*, *Grasses*.

Globular, in *Mercurialis*.

Sagittate, or shaped like the head of an arrow, in *Crocus*, *Nolana*, *Soldanella*, *Dodecatheon*, *Nerium*, *Linum*, *Bromelia*.

Angular, in *Tulip*.

Horned, in *Hamamelis*, *Erica*, *Vaccinium*, *Pyrola*.

Forked (*bifurcatae*), in most *Grasses*.

Linear, in *Heliocarpus*, *Stapelia*, *Canna*, *Protea*, *Coffea*, *Liriodendrum*, *Magnolia*.

Subulate, or awl-shaped, in *Roella*, *Cornus*.

Lanceolate, or shaped like the head of a spear, in *Bankia*.

Hastate, or shaped like the head of a halbert, in *Jacquinia*.

Cordate, or heart-shaped, in *Capraria*, *Tinus*, *Bucida*, *Mulpigbia*, *Thea*.

Reniform,

Reniform, or kidney-shaped, in *Ginora*,
Tradescantia, and the class *Monadelphica*.
 Ovate, or egg-shaped, in *Linum*, *Glad-*
ius, *Commelina*, *Convolvulus*.

Three-cornered (*trigona*), in *Rosa*.

Four-cornered (*tetragona*), in *Cannabis*,
Populus, *Dictamnus*, *Cestrum*, *Arum*, *Can-*
nabis.

Lunular, or shaped like a crescent, in *Fra-*
garia, *Comarum*.

Spiral, or twisted like a screw. *Chironia*.

They have only

One cell, in *Mercurialis*.

Two cells, in *Epimedium*, *Asclepias*, *Daph-*
ne, *Helleborus*.

Three cells, in *Orchis*.

Four cells, in *Fritillaria*, *Tropæolum*, *Pæo-*
nia, *Salix*.

APETALOUS flower (*Apetälus flos*): with-
 out any corolla. Called by other writers
 Stamineous, Incomplete, Imperfect. Of
 such, a class is formed in several systems.

APEX; the tip summit or end. When ap-
 plied to leaves, it is the upper extremity,
 farthest from the base or insertion.—Ray
 calls the Anther by this name.

A P

APHYLLOUS (*Aphyllus*); leafless, destitute of leaves: applied to the stem, and opposed to *foliatus*, leafy.

APOPHYSIS. A process or excrescence from the receptacle of mosses.

APPENDICULATE, Appendicled, or Appendaged, (*Appendiculatus*). *Ramculis foliaceis ad basin*. This term is applied to a petiole, when it has a small leaf or leaves at the base.

APPRESSED (*Appressus* or *Adpressus*), pressed or squeezed close. Contiguous or laid to, *With*. Applied to a leaf, when the disk approaches so near to the stem, as to seem as if it had been pressed to it by violence: also to a calyx, when it is close to the peduncle—and to a peduncle, when it is close to the branch or stem.

APPROXIMATING leaves. Growing very near each other. Opposed to *remote*. With reference to the stem, growing almost upright.

AQUATIC

AQUATIC plants. Growing in or near water.

ARACHNOIDEUS, Cobwebbed. Covered with a thick interwoven pubescence, resembling a cobweb. Leaf, peduncle, calyx.

ARBOREOUS (*Arboreus*) stem. Single, woody and permanent; as the trunk or bole of a tree. Opposed to shrubby, under-shrubby and herbaceous.

ARBORESCENT (*Arborescens*) stem. From herbaceous becoming woody.

ARBUSTIVA (from *Arbustum*, a shrub). The name of the thirty-ninth order, in Linneus's Fragments of a Natural Arrangement, in *Philosophia Botanica*. The same with *Hesperideæ*, in his *Genera Plantarum* n. 19:

ARCHED (*Fornicatus*). As the upper petal of the *Aconite*, and the upper lip of some ringent flowers. See *Vaulted*. It should seem that either term might be adopted indifferently.

ARCUATUS,

A R

ARCUATUS, Bowed. Bent like a bow. See *Bowed*.

ARIL (*Arillus*). The outer coat of a seed falling off spontaneously: or, inclosing the seed partially (*interdum includit partialiter semen. Reg. Veg.*). As in *Coffea*, *Jasminum*, *Cynoglossum*, *Cucumis*, *Dictamnus*, *Diosma*, *Celastrus*, *Euonymus*. Scopoli has distinguished such fruits by the name of *Theca*.

ARISTA and *Aristatus*. See *Awn* and *Awned*.

ARMS (*Arma*). *Mucrones arcentes animalia, ne lædant plantam*. Thorns, prickles, and stings, with which plants are furnished for their defence. Enumerated among the *Fulcres*. See *Fulcrum*, *Prickle*, *Stings*, *Thorn*.

ARROW-SHAPED leaf, anther, stipule. See *Sagittatum*.

ARTICULATUS, Jointed. *Articulata radix, geniculis intercepta*. *Articulatus truncus, internodiis*

internodiis geniculatus. Articulatum folium, folio ex apice folii excrefcente. *Delin. Plantæ.* See *Jointed*.

Articulatè-pinnatum. See *Pinnatum*.

ARTICULUS. Joint. Culmi pars geniculis duobus interjecta. See *Joint*.

Artificial Clafs and System. See *Clafs*.

ASCENDING (*Ascendens* v. *Adscendens*).

From a horizontal direction gradually curved or bowed upwards. As the stems of many plants ; the leaf ; the peduncle ; the banner of papilionaceous flowers ; the filaments ; and the style.

ASPARAGUS. The first tender sprout, or young shoot of an herb from the ground, before any leaves unfold themselves. *Ray*.

ASPER, Rough with hairs.

Said, in *Philos. Bot.* and *Delin. Plantæ*, to be the same with *Scaber*, rugged ; but it seems to be a term of more extensive signification than that. See *Scaber*, and *Rugged*. *Exasperatus*, roughened.

ASPE-

ASPERIFOLIÆ (*Rough-leaved*). The name of the 43d order in Linneus's *Fragmenta*, and of the 41st in his *Ordines Naturales*. Ray and others have the same natural order.

ASSURGENS petiolus. *Affurgentia* folia. *Arcuatim erecta, primum declinata, dein apice erecta*. Rising up in a curve, declining at the base, but upright at the tip. A rising petiole—rising leaves.

ATTENUATUS pedunculus, scapus. Attenuated, tapered or tapering. Becoming gradually smaller towards the flower. Opposed to *incrassated* or *thickening*. *Attenuatum folium*, a leaf tapering towards one or both extremities.

AUCTUS (*increased*) calyx. See *Calyculate*.

AVENIUM folium. A veinless leaf, without perceptible veins.

Auriculatus and *Auritus*. See *Eared*.

AWL-SHAPED. See *Subulatus*. I cannot approve of *Awled*.

AWN (*Arista*). A slender sharp process issuing from the glume or chaff, in corn and grasses. It is commonly called in English *the Beard*, but this term is otherwise applied. See *Beard*.

The Awn is either

Terminating, fixed to the top of the glume;
or

Dorsal, placed on the back or outside of it.

It is also

Straight.

Geniculate, or bent like the knee joint.

Recurved, or bowed back.

Twisted (*tortilis*), or coiled like a rope.

The Anther sometimes terminates in an awn.

AWNED (*Aristatus*). Having an awn. As the glume and anther.

AWNLESS (*Muticus*). Having no awn; opposed to *awned*. As in the glume of *Agrostis* and *Aira*; the calyx of *Serratula*; the seeds of *Adonis*, &c. An awn, however, is said to be *mutica* when it is not sharp-pointed; *acumine destituta*.

Axe-form. See *Dolabrisform*.

B A

AXIL or *Axilla*. The angle formed by a branch with the stem, or by a leaf with the branch. So named from its similarity to the armpit. Some old writers call it *Ala*, but this term is otherwise appropriated.

AXILLARY leaves. Growing at the angles formed by the branches with the stem; or, inserted at the base of the branch. Axillary peduncle, scape, cirrus or tendril, and thorn; proceeding from the axils, or from the bosom of the leaves or branches.

B

BACCA, a Berry: which see.

Bacciferous. Berry-bearing.

BAG. See *Folliculus*.

BANNER or Standard (*Vexillum*). The upper petal of a papilionaceous corolla.

BARB (ἑλωχίς, *Glochis*). A straight process,
E
cess,

cess, armed with several teeth pointing backwards, like the sting of a bee. This is one sort of pubescence in plants; and is distinguished from the hook (*hamus*) by the point not being bent.

Barba. See *Beard*.

Barbātus. See *Bearded*.

BARE. See *Naked*.

BARK. The skin or outer covering of a plant. This is threefold.—1. The cuticle, *Epidermis*. 2. The outer bark, *Cortex*. 3. The inner bark, *Liber*.

BARREN (*Sterilis*) flower. Not capable of bearing seed, which the abortient flower might have done in favourable circumstances.

BAY colour, from the Greek Βαίος, the spadix of the Palm; whence it is called *Spadiceus* in Latin.

BEAKED (*Rostrātus*). Terminated by a process, shaped like the beak (*rostrum*)
of

B E

of a bird, applied to fruits. See *Roftratus*.

BEARD (*Barba*). In pubescence, parallel hairs; or a tuft of stiff hairs terminating the leaves, as in *Mesembryanthemum barbatum*.—Rivinus and others give this name to the lower lip of a ringent corolla.—In common language the awn is called the beard.

BEARDED (*Barbatus*). Having parallel hairs, or tufts of hairs. Applied to leaves—to the corolla, as in *Dianthus barbatus*, *Gentiana campestris*—and to the nectary, as in *Iris*.

BEARDLESS (*Imberbis*). Void of parallel hairs or tufts. As the corolla in some species of *Iris*, *Gentiana filiformis*, &c.

BELL-SHAPED, Bell-form, or Campanulate corolla (*Campanulata*). Swelling or bellying out, without any tube, as in *Campanula*, *Convolvulus*, *Atropa*, *Gentiana*, &c.—This term is applied pro-

B E

perly to monopetalous corollas only, although it be sometimes extended to such as are polypetalous.—Calyxes, as in *Chironia*; and *Nectariums*, as in *Narcissus*, are also bell-shaped. Tournefort has a class of *Campanulate* or Bell-shaped flowers.

I cannot approve the use of the term
bell'd.

BELLYING or *Bellied* (*Ventricosus*). Swelling out in the middle. Applied to the spike—to the perianth, as in *Æsculus*—to the corolla, as in *Digitalis*. If any one should object to this term as vulgar, he may use the word *Ventricose* instead of it; but I do not see why Botanists may not speak of a *bellying* corolla, with as much delicacy as Poets of *bellying* sails.

BERRY (*Bacca*). A succulent or pulpy pericarp or fruit, without valves, containing naked seeds. These are sometimes dispersed loose among the pulp (*inipulantia*), as in *Nymphaea*; but they
are

B E

are generally placed on receptacles, as in *Currant*, *Gooseberry*, &c.

Many fruits, having the appearance of Berries, but not corresponding with the definition, are improperly so called—as *Xanthium*, *Capficum*, *Rhus* or *Sumach*, *Cyclamen*, *Mespilus*, *Citrus* or *Orange* and *Lemon*, *Taxus* or *Yew*, *Bromelia* or *Pine-apple*.

Such also as are formed by any part except the pericarp are improperly called Berries—as a large succulent calyx, in *Mulberry*, *Rose*, *Blite*, *myrtle-leaved Sumach* (*Rhus Coriaria*)—the receptacle, in *Strawberry* and *Cashew-nut*—the nectary, in *Marvel of Peru*—the tube of the corolla, in *Poterium* and *Sanguisorba*.

Such fruits as *Mulberry*, *Raspberry* and *Blackberry*, being usually regarded as berries, might very well be called *Compound Berries*, each of the component parts, which are called *Acini*, being a small berry, containing one seed immersed in the pulp. See *Acinus*.

B I

BICAPSULAR (*bicapsulāre*) pericarp. Having two capsules containing seeds, to each flower. As in *Pæonia*.

BICORNES (two-horned). Plants with anthers having two horns. The name of the twenty-fourth order, in Linneus's Fragments of a Natural Arrangement.

BIENNIAL (*Biennis*) root. Enduring two years, and then perishing. In biennial plants a root and leaves are formed during the first year, and in the second the fructification is completed.

BIFARIOUS leaves (*Bifāria folia*). Pointing two ways; or, coming out only on opposite sides of a branch.

Bifariouſly hairy, ſtem or branch. When the hairs between any two joints come out on the front and back; and in the two adjoining internodes, on the right and left ſides.

BIFEROUS plants. Bearing twice in a year.
Common

B I

Common in hot climates.—“*Biferique rosaria Pæsti.*” Virg.

BIFID, two-cleft, or cloven. Leaf—Perianth, as in *Utricularia*—Stigma.

See *Cleft*.

BIFLOROUS peduncle (*pedunculus biflorus*).
Two-flowered, or bearing two flowers.

BIGEMINATE leaf (*folium bigeminum*).
Twin-fork. *With.* A decompound leaf, having a dichotomous or forked petiole, with several folioles or leaflets at the end of each division. *Bigemina folia, petiolo dichotomo apice anneſcent foliola plura.*

BIJUGOUS leaf (*folium bijugum*). A pinnate leaf having two pairs of leaflets.

BILABIATE or two-lipped corolla (*bilabiata corolla*). As in *Pinguicula*, and the class *Didynamia*. See *Labiate*.

BILAMELLATE stigma (*stigma bilamellatum*). The form of a flattened sphere,
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B I

longitudinally bifid. *Globus compressus* & *longitudinaliter bifidus*.

BILOBATE leaf (*folium bilobum*). Divided into two lobes. See *Lobus* and *Lobatum*.

BILOCULAR pericarp (*biloculare pericarpium*); or more properly two-celled; divided into two cells internally; as in *Hyoscyamus*, *Sinapis*, *Nicotiana*, &c Some seeds are also two-celled, as in *Cornus*, *Xanthium*, *Valeriana* *Locusta*, *Cordia*.

BINA folia. Two-fold leaves; or rather coming out two and two together, from the same place, or at the same joint of a branch.

BINATE leaf (*binatum folium*); *digitatum foliolis duobus terminatum*. Having a simple petiole connecting two leaflets at the top of it: a species of digitate leaf, which see. *Binati pedunculi*, Peduncles growing in pairs; as in *Capraria*, and *Oldenlandia zeylanica*.

BIPAR-

BIPARTIBILE. *Bipartile.* Divisible into two: as the fruit of umbellate plants into two seeds.

BIPARTITE, leaf, perianth, corolla. Divided into two parts to the base. See *Partitum*.

BIPINNATE, or doubly-winged, Leaf or Frond. When the common petiole has pinnate leaves on each side of it: as in *Athamanta Libanotis*, *Anemone Pulsatilla*, &c. and many of the *Ferns*.

BIPINNATIFID, or doubly-pinnatifid, Leaf. When the common petiole has pinnatifid leaves on each side of it. See *Pinnatifidum*.

BITERNATE or doubly-ternate Leaf. When a petiole has three ternate leaflets. As in *Epimedium*.

Bitten root, leaf, corolla. See *Præmorsus*.

BIVALVE, or two-valved, Pericarp. In which the covering, or seed-case, splits into two parts,

parts, as in *Chelidonium*, all the *Siliques* and *Legumes*.—The glume or chaff, which is the calyx and corolla of corn and grasses, is generally bivalve, or consisting of two pieces.

BLADDER (*Vesicula*). A distended membranaceous pericarp; as in *Colutea*. See *Vesicularis*.

Blistered. See *Bullate*.

Blossom, in common language, is the corolla of fruit-trees. Dr. Withering makes it the English term for corolla.

BLUNT, or *Obtuse*, Leaf, Perianth, Capsule. Ending in a segment less than that of a circle. Opposed to sharp or acute.

BOAT-SHAPED, Navicular or Cymbiform; as the valve of some pericarps, and the carina of papilionaceous flowers. Hollowed and resembling a boat in shape. See *Navicularis*.

Bole, the naked trunk of a tree.

BORDER

BORDER or **Brim** (*Limbus*). The upper spreading part of a monopetalous or one-petalled corolla. See *Limbus*.

BOTANY (from *Βοτάνη*, an herb or plant). That branch of Natural History which treats of Vegetables.

“*Botanicus est ille, qui Vegetabilia similia similibus, et distincta distinctis nominibus, cuicunque intelligibilibus, nescit nominare.*”
Lin.

BOUGH. A subdivision of the trunk, in a tree. See *Branch*, which is of a more extensive signification.

BOWED (*arcuatus*). Bent like a bow. Applied to frond, filament, anther, legume. *Flexus*, with its derivatives, signifies—bent at an angle.

Bowed in (*incurvus*) is perhaps better expressed, *curved inwards*: and *inflexus*, *bent inwards*.

BRACHIATE (*Brachiatus caulis*), (from *Brachium*,

Brachium, the arm). Having branches (stretched out like arms) in pairs, decussated, all nearly horizontal, and each pair at right angles with the next. See *Decussated*.

BRACTEA, Bracte, or Floral leaf. “*Sequentis anni folia. Delin. Pl.—Bractea* “*florum, ad florum pedunculorumve basin,* “*foliacea.*” One of the seven fulcres or props of plants. A leaf different from the other leaves in shape and colour, generally situated on the peduncle, and often so near the corolla as easily to be mistaken for the calyx, as in *Hellebore*, *Nigella*, *Passion-flower*, *Hepatica*, *Peganum*. The calyx however withers when the fruit is ripe, if not before; whereas the bracte is generally more permanent.

Bractes are either *green* or *coloured*.
Deciduous—Caducous—or Permanent.—
One, two, or more.

Instances of remarkable Bractes may be observed in *Lime-tree*, *Melampyrum*,
Monarda,

B R

Monarda, Salvia, Lavandula, Bartsia
Hebenstreitia, Mussenda, Fumaria. See
Coma.

It seems better to preserve the term *Bractea* or *Bracte*, than to translate it: for Linneus frequently calls leaves which are near the flower, *Floral leaves*, when they differ from the other leaves, though they are not properly Bractes. *Bractæ* is by no means an English plural.

BRACKETED (*bracteātus*). Furnished with bractes; as the Peduncle, and Verticil or whorl.

BRANCH (*Ramus*). A division of the main stem, supporting the leaves and fructification.

BRANCHED or **Branching** (*Ramōsus*). Furnished with lateral divisions. Opposed to simple. Applied to the root, as in *Urtica*—to the stem; and to bristles.

When a plant is loaded with many branches, coming forth without order, it is said to be very branching (*ramosissima*).

When

B R

When it has only a few lateral divisions, it is said to be *subramose*.

BRANCH-LEAVES (*Ramea folia*). Leaves growing on the branches.

BRANCHLET (*Ramulus*), dimin. of Branch. A subdivision of a branch ; a twig.

BRANCH-PEDUNCLE (*ramæus pedunculus*). A peduncle springing from a branch.

BRIGHT (*lucidum*) leaf. See *Lucidum*.

BRISTLE (*Seta*). A species of pubescence, in form of a stiff roundish hair ; on the stems, branches, leaves, flowers or fruits : sometimes covering almost the whole surface of plants.

Bristles are either simple or hooked. *Branched*, *feathered* (*plumosæ*), and *stellate* or *rayed* (*stellatæ*).

BRISTLE-SHAPED : of the thickness and length of a bristle ; applied to the structure of a leaf (*folium setaceum*) ; shorter therefore than a capillary leaf.

BRISTLY

BRISTLY (*setosum*), set with bristles: as some receptacles, which have bristles interposed between the florets. In *Cynara* or *Artichoke*, *Centaurea*, *Echinops*.

BUD or Gem (*Gemma*). A hybernacle, or winter receptacle of leaves and flowers on the stem or branches; or, as Linneus expresses it, on the ascending *caudex*. It consists of stipules, or petioles, or the rudiments of future leaves, or cortical scales.—Hence Buds are called *Stipular*, *Petiolar* and *Cortical*.

Most plants in cold countries, but scarcely any in hot climates, have buds.

A Bud is

1. Leaf bearing (*foliaris*): as in *Alder*.
2. Leaf and flower-bearing distinct: as in *Poplar*, *Willow*, *Ash*.
3. Leaf and female-flower-bearing: as in *Hazel* and *Hornbeam*.
4. Leaf and male-flower-bearing: as in *Pine* and *Fir*.
5. Leaf

B U

5. Leaf and hermaphrodite-flower-bearing (*floralis*) : as in *Daphne*, *Ulmus*, *Cornus*, *Amygdalus*.

6. Leaf and flower-bearing together (*communis*) : as in most trees.

See *Læfling. Diff. de Gemmis, in Amœn. Acad.*

BULB (*Bulbus*). A hybernacle, or winter receptacle of a plant, composed of the bases of past leaves, and placed immediately upon the root. It is vulgarly considered as a root; and was called so by Botanists till Linneus corrected the error, and shewed that it was a single bud, enveloping the whole plant.

A Bulb is, 1. Scaly (*squamatus*), as in *Lily*. 2. Solid, as in *Tulip*. 3. Coated (*tunicatus*), as in *Onion*. 4. Jointed, as in *Lathræa*, *Martynia*, *Adoxa*.

Some flowers are succeeded by Bulbs instead of seeds: as in *Allium*. The stem, in this case, is call *Bulbiferous* or Bulb-bearing.

BULBOUS

B U

BULBOUS plants (*Bulbosæ*). Growing from bulbs. The title of a Class in Cæsalpinus, Ray, and other systematic writers.

Roots that are solid and roundish, like true bulbs, are also called Bulbous; as in *Turnep*, *Ranunculus bulbosus*, &c.

BULLATE leaf (*folium bullatum*). When the substance rises high above the veins, so as to appear like blisters. It is only a greater degree of the wrinkled leaf (*fol. rugosum*).

BUNCH. See *Racemus*.

BUNDLE or Fascicle (*Fasciculus*). Several roots, leaves or flowers collected together, or proceeding from the same point.

A root in bundles (*radix fascicularis*) is a sort of tuberous root, with the tubers or knobs collected in bundles: as in *Pæonia*.

Leaves are fasciculate (*folia fasciculata*),
F
or

or grow in bundles or bunches, in the *Larch*.

In the fructification, Linneus explains a bundle (*fasciculus*) to be a species of inflorescence, collecting upright, parallel, fastigate-approximating flowers.

BURR (*Echinus*). A prickly pericarp.

BUTTERFLY-SHAPED Corolla. See *Papilionacea*.

C

CADUCOUS (*Cadūcus*, from *cado*, to fall). Falling off quickly. Applied to stipules and bractes; to leaves that fall before the end of the summer (*brevi decidentia, nec per integram æstatem permanentia. Delin. Pl.*)—to calyxes and petals falling before the corolla is well unfolded.—*Papaver* and *Epimedium* are instances of the caducous calyx: *Asiæa* and *Thalictrum*, of caducous petals.—

This

This term is different from *deciduous*; which see.

CALAMARIÆ (from *Calāmus*, a reed). The thirteenth order in Linneus's Fragments of a Natural Arrangement, in *Philosophia Botanica*; and the third of the Natural Orders, at the end of *Genera Plantarum*. It contains the Sedges, and other plants, allied to the Grasses.

CALCAR corollæ. *Est ejusdem basis productio coniformis.* See *Spur*.

CALCARATUS calyx; a Calcarate calyx, as in *Tropæolum*. **Calcarata corolla**: a calcarate corolla, as in *Larkspur*, &c. Furnished with a spur. **Calcaratum nectarium**; a calcarate or spur shaped nectary. In shape resembling a cock's spur, as in *Larkspur*, *Antirrhinum*, *Valerian*, *Pinguicula*, *Utricularia*. See *Spur*.

CALYCANTHEMI. The fortieth order in Linneus's Fragments of a Natural Arrangement.

CALYCINE F. Of or on the calyx: as calycine scales—calycine thorns.

CALYCLE (*Calycūlus*). A row of small leaflets placed at the base of the calyx, on the outside.—Calycle of the seed is the outer proper covering or crown of the seed, adhering to it, in order to facilitate its dispersion. This word is evidently a diminutive of Calyx.

CALYCVULATE or Calyceled (*Calyculatus* f. *Auctus*). A calyx having a calycle or little cup at the base, on the outside: as in *Dianthus*, *Coreopsis*, *Bidens*, *Crepis*, *Chondrilla*, *Prenanthes*, *Hedypnois*, *Lapsana*.

CALYPTRA, Calypstre, or veil (from καλυπτω, to cover). The calyx of mosses, covering the anther like a hood, according to Linneus: but not properly a calyx; and the part which he calls the anther, is in fact a capsule.—Old authors used this term for what Linneus calls the *arillus*; and in this sense *Euonymus* is said to be calyp-tred,

tred, calyptrate or veiled ; having a loose covering over the pericarp.

CALYX (καλυξ from καλυπω, not καλιξ. a cup). The outer covering of the flower, or the first of the seven parts of fructification, formed, according to Linneus, of the *cortex* or outer bark. In another place he explains it to be, the *cortex* or outer bark present in the fructification.—*Tegmentum exterius floris e cortice.* Regn. Veget. *Cortex plantæ in fructificatione præsens.* Delin. Pl. This term includes not only the *Perianth*, which is often exclusively called the Calyx ; but also the *Involucre*, *Ament*, *Spathe*, *Glume*, *Calyptræ*, and *Volva* ; and therefore is of a much more extensive signification than *Perianthium*. The Calyx is frequently called *Empalement* and *Flower-cup* by English writers. With respect to the latter of these names I have observed, that Calyx is not derived from καλιξ a cup ; and, if it be admitted at all, should be confined to what we call the *Perianth*—which see.



C A

CAMPANACEI (*Campāna*, a bell.) The thirty-second order in the Fragments of a Natural Method, by Linneus: containing plants with bell-shaped flowers.

CAMPANULATA corolla. From *campanŭla* (dimin. of *campana*) a little bell. See *Bell-shaped*.—*Campanulatus* calyx, a bell-shaped calyx—*Campanulatum* nectarium, a bell-shaped nectary.

CANALICULATUM folium (dimin. from *canālis* a canal or channel). *Supra sulco profundo longitudinaliter excavatum*. See *Channelled*.

CANCELLATUS (*Cancelli*, trellis or lattice work). See *Latticed*.

CANDELARES (*Candēla*, a candle). The sixty-second order in Linneus's Fragments of a Natural Method.

CAPILLARES. The name for the class of *Ferns*, in the Systems of Morison, Ray, and Boerhaave.

CAPIL-

CAPILLARY (*Capillacæus* f. *Capillāris*, from *Capillus*, a hair.) Long and fine, like a hair.—Applied to leaves, that are longer than the setaceous or bristle-shaped leaf; as in *Ranunculus aquatilis*, *Artemisia capillaris*.—To glands, resembling hairs; as in *Ribes*, *Scrophularia*, *Cerastium*, *Silene*.—To the filaments; as in *Dipsacus*, the *Grasses*, &c.—To the style—And to the pappus or down, affixed to some seeds; as in *Sonchus*, *Lactuca*, *Chondrilla*, *Prenanthes*, *Leontodon*, *Hieracium*, *Crepis*, *Andryala*, *Carduus*, *Onopordum*. This is by some called *pilosus*; and is opposed to *plumosus* or *feathered*. Ray calls the stamens, *capillamenta*.

CAPILLUS (a hair). Is sometimes put for a measure; the diameter of a hair, or the twelfth part of a line.

CAPITATÆ (*Caput*, a head). The second division of the twenty-first order (*Compositi Capitati*) in Linneus's *Fragments of a Natural Method*, in *Philosophia Botanica*; and the first division of the forty-

ninth order in the *Ordines Naturales*, at the end of *Genera Plantarum* (*Compositæ Capitatæ*). Also the second division of the first order, in the class *Syngenesia*, in his Artificial System: and the ninth class in Ray's Method. It contains the thistles and other plants with compound flowers, growing in a head.

CAPITATUS. Capitate, growing in a head. See *Head*.—Applied to flower (*capitatus flos*) and stigma (*capitatum stigma*).

CAPITULUM (dimin from *caput*). *Constat floribus plurimis in globum ferme congestis: Gomphrena.* See *Head*.

CAPREOLUS (dimin. from *caprea*; or *a capiando*). See *Cirrus* and *Tendril*.

CAPSULE (*Capsŭla*, a little chest or casket). *Pericarpium cavum determinate debiscens.* Delin. Pl. & Philos. Bot.—*Membranacea, valvis debiscens varie in variis.* Regn. Veg.—A membranaceous hollow pericarp, opening in some determinate manner—
or,

C A

or, differently in different plants. The parts of which a capsule is composed, are—1. The Valves or outer covering (*valvulae*). 2. The Partitions (*dissepimenta*). 3. The Columella or central pillar. 4. The Cells (*loculamenta*). See all these terms explained in their proper places. Instances of capsules may be observed in *Tulip*, *Crown Imperial*, *Iris*, *Poppy*, &c. &c.

Capsules are distinguished from the number of their valves and cells. Thus we say, a five-valved capsule, or a capsule of five valves: a two-celled capsule, or a capsule of two cells. Bilocular, is not so proper, because we translate *loculamentum* by the term cell.

Some flowers are succeeded by more capsules than one: such fruits are called bicapsular, two-capsuled, or fruits of two capsules, &c. according to the number succeeding to each flower.

Capsules are *twin* or double (*didymæ*)—*dicoccous*, or two-grained—*tricoccous*, or three-

three-grained. — *Jointed* (*articulatæ*). — *Circumscissæ*, opening in the middle transversely into two hemispheres. *Elastic*, or opening with a sudden spring. *Inflated*, or puffed up like a blown bladder.

CARINA. The lower petal of a papilionaceous corolla. See *Keel*.

CARINATED. *Calyx carinatus*, a keeled calyx. *Folium & nectarium carinatum*, a keeled leaf, and nectary. Having a longitudinal prominency upon the back, like the keel of a vessel.

CARNOSUM folium. A Fleishy leaf. See *Fleishy*.

CARTILAGINOUS leaf (*Cartilagineum folium*). Having the edge strengthened by a tough rim of a substance very different from the disk—*marginè subossæo*.

CARYOPHYLLÆUS flos—caryophyllæa corolla. Resembling that of a single pink or carnation (*Caryophyllus*); having five regular petals, ending at bottom in a long,
narrow

C A

narrow claw. This is a term used by Tournefort: but hence Linneus has constituted an order of plants, called *Caryophyllææ*, in his Fragments of a Natural Method, and his Natural Orders.

CASTRATA stamina f. filamenta. Without anthers: as in some species of *Geranium*.

CATKIN and *Catulus*. See *Ament*.

CAUDA. See *Tail*.

CAUDEX (from *cædo*, to cut down). The stem or trunk of a tree. According to Linneus, when a seed germinates, the descending stem (*caudex descendens*) terminates in roots; the ascending stem (*caudex ascendens*), in branches and leaves.

CAULESCENT plant (*planta caulescens*). Having a stem different from that which produces the flower. Opposed to *Acaulis* or *Stemless*. Linneus applies this term to
the

the root also: as in *cabbage*, *navew* and *turnep*.

CAULINE leaf. Growing immediately on the stem, without the intervention of branches. Applied also to the bulb, peduncle and scape. *Caulinus bulbosus*, *pedunculatus*, *scapus*—*caulinum folium*.

CAULIS (καυλος). But the signification of the Greek word is more extensive than that of the Latin, for it comprehends the trunk of a tree, whereas the Latin term is confined to the stalk of herbs only. Our English *Kale*, and *Cole* (in Colewort and Coleseed), come from *caulis*, as well as *Cauliflower* vulgarly *Collyflower*: but immediately from the Low-Dutch *Kool*. See *Stem*.

CELL (*Loculamentum*). The hollow part of a pericarp, and particularly of a capsule in which the seeds are lodged.—According to the number of these, pericarps are called *one-celled*, *two-celled*, &c.

CERNUUS (q. *qui terram cernat*) flos f. pedunculus. *Apice terram spectans.—Cum apice incurvatur, ut flos versus latus alterum vel terram nutet; nec poterit erectus attolli ob curvaturam strictam pedunculi.* It may be translated *drooping*, and must be distinguished from *Nutans*, *nodding*. See these words.

CESPITOSA planta (*Cespes*, turf). *Cum multi caules ex eadem radice prodeunt.*—A cespitose or turfy plant, has many stems from the same root, usually forming a close thick carpet, or matted together.

CHAFF (*Palëa*). The dry calyx of corn and grasses, in common language; by Linneus called *Gluma*. See *Gluma*. Also,

A dry membranaceous body interposed between two florets, in some of the class *Syngenesia*.

CHAFFY receptacle; *paleacëum receptaculum*. In which the florets are divided by interposed chaffs or scales. As in *Dipsacas*,

C H

facus, Scabiosa, Hypochaeris, Catananche, Arctium, Onopordum, Serratula, Bidens, Santolina, Athanasia, Xeranthemum, Zinnia, Anthemis, Achillea, Verbesina, Sigesbeckia, Bupthalmum, Helianthus, Rudbeckia, Coreopsis, Silphium.

CHANNELLED (*canaliculatus*). Hollowed above with a deep longitudinal groove; convex underneath. Applied to the stem, leaf, and petiole.

CHARACTER. The peculiar circumstance or circumstances that distinguish a vegetable, or a set of vegetables, from all others. Characters are *Specific*, *Generic*, or *Classical*—*Essential*, *Natural*, or *Artificial*. See *Class*, *Genus*, *Species*: *Essential*, *Factitious*, *Natural*.

CHINKED (*Rimosus*). Applied to the outer bark of trees, especially old ones.

CHIVE. Put by some English writers for *Stamen*.

CICA-

C I

CICATRISATUS truncus f. caulis. A scarred stem. Marked with the remains of leaves that have fallen off.

CILIATUM folium. A ciliate leaf (from *ciliæ*, the eye-lashes). The edge guarded by parallel bristles longitudinally: as in *Drosera*, *Crassula coccinea* & *cymosa*, *Erica tetralix* & *ciliaris*, &c.—It is applied also to the Stipule—the Spike—and the Corolla; as in *Ruc*, *Menyanthes*, *Tropæolum*.

This term is frequently but improperly translated *Fringed*, which answers to the Latin *Fimbriatus*. See these words.

CINEREOUS. The colour of wood ashes.

CIRCINALIS vernatio. *Quum folium in spiram transversalem coarctatum sit; ut apex centrum obtineat.* Delin. Pl.—*Circinalia folia, quum deorsum spiraliter involvuntur.* Philos. Bot.—A term in foliation or leafing; importing that the leaves are rolled in spirally downwards, the tip occupying the centre. As in *Ferns*, and
some

some *Palms*.—For this we have no equivalent English term, unless we may use the word *spiral*, which scarcely expresses the idea.

CIRCULAR. See *Orbiculatum*.

CIRCUMSCISSA capsula. Quæ maturo fructu horizontaliter discedit. s. quæ media fere parte in hemisphæria duo diffilit.—Cut round. Opening, not longitudinally or vertically, as in most capsules, but transversely or horizontally, like a snuff-box; usually about the middle, so as to fall nearly in two equal hemispheres. Instances of this we have in *Anagallis*, *Hyoscyamus*.

CIRRIFERUM folium: A tendril-bearing leaf, as in *Fumaria capreolata* & *claviculata*. Cirriferus pedunculus: a tendril-bearing peduncle; as in *Cardiospermum* and *Vitis*.

CIRROSUM folium: a cirrose leaf. Terminating in a cirrus or tendril: as in *Gloriosa*, *Flagellaria*, *Lathyrus*, &c.

CIRRUS

CIRRUS (*Cirri, capilli intorti*, frizzledh air).

Some derive it from *κερας*, a horn; others from *κείρειν*, to shear; others from *σκιρρος*, a hard tumour; others again from *circum*, q. *capilli circum torti*: such is the uncertainty of derivation.—Linneus explains it to be—*vinculum filiforme spirale, quo planta alio corpori alligatur*.—He writes it with an *h*.—See *Tendril*.

CLAMMY. *Viscidus*.

CLASPER. See *Tendril*.

CLASPING, stem-clasping, embracing leaf (*folium amplexicaule*). Surrounding the stem at the base.

CLASS (*Classis*). The primary division in a system or arrangement. Tournefort defines it to be—*congeries generum, quibus nota quædam communis adeo propria est, ut ab aliis omnibus generibus plantarum prorsus differat*. An assemblage of genera, in which some common mark is so peculiar, that it differs entirely from all

G

other

other genera of plants.—According to Linneus it is—*generum plurium convenientia in partibus fructificationis, secundum principia naturæ & artis*. The agreement of several genera in the parts of fructification according to the principles of nature and art.

Classes are either *Natural* or *Artificial*. Natural Classes are such as contain genera which are evidently related to each other: as *Umbellate*, *Verticillate*, *Siliquose*, *Leguminose* plants, the *Compound* flowers, and *Grasses*.

Artificial Classes are merely succedaneums to natural ones, which we are obliged to adopt for want of a complete knowledge of the true characters of plants, and their relations to each other.

Natural Classes have been attempted by Royen, Haller, Linneus, and lately by Jussieu.

Linneus's artificial system or general arrangement of vegetables has twenty-four

four classes, besides the Palms, &c. in a twenty-fifth. These are founded principally on the number, situation, and proportion of the stamens; and several of them are natural.

CLAVATUS (*clava*, a club) club-shaped.

Versus apicem incrassatus; growing gradually thicker toward the top. Applied to the leaf, as in *Anabasis foliosa*—to the petiole and peduncle—to the calyx, as in *Silene*—to the style, as in *Leucoium vernum*—to the capsule, as in *Papaver Argemone*.

CLAVICULA. The same with *Capreolus* or *Cirrus*. See *Tendril*.

CLAW (*Unguis*). The lower narrow part of the petal in a polypetalous corolla, by which it is fixed to the receptacle.

CLEFT leaf (*folium fissum*). Divided by linear sinuses, with straight margins. According to the number of these divisions, such a leaf is called bifid, trifid, quadrifid,

drifid, quinquefid, multifid; or two-cleft, three-cleft, &c.—The term is also applied to the Perianth, and to Stipules, in the same manner.

CLIMBING plant (*Scandens*). Ascending by means of tendrils; or sometimes by the stem or branches; but without twining, which see.

CLOVEN. See *Cleft*.

CLUB-SHAPED (*Clavātus*.) Growing thicker toward the top. See *Clavatus*.

CLUSTERED or crowded (*Confertus*). See *Confertus*.

COADUNATA folia (Coadunate leaves). Several joined together, or united at the base. Coadunati lobi.

COADUNATÆ, the fifty-second of Linneus's Natural Orders.

COARCTATUS. Squeezed or pressed together. Compact, *With*. Coarctati rami;
versus

C O

versus summitatem fere incumbentes : condensed branches. Opposed to *divergentes*.
—See *Condensed*. Coarctati pedunculi condensed peduncles; opposed to *patuli*. Coarctata panícula; a close or contracted panicle; opposed to *diffusa*.

COATED or tunicated (*tunicatus*). Composed of concentric layers; as the bulb of the Onion: or clothed with membranes; as some stems.

COWEBBED (*arachnoidēus*). Covered with a thick interwoven pubescence. Applied to the leaf, peduncle, and calyx.

COCCUM (κοκκον), a grain or seed. Linneus applies this term to some fruits of a particular structure, having several cells with a single seed in each. Thus *Euphorbia* and *Thea* have a tricoccous fruit; *Geranium* has a pentacoccous or five-grained fruit.

COCHLEATUM legumen. A screw-shaped, or snail-shaped legume or pod. Turned

C O

like a screw, or the shell of a snail. As in *Medicago*.

COILED (*tortilis*). Bent or twisted like a rope. See *Tortilis* and *Twisted*.

COLLUM. The neck or upper part of the tube, in a monopetalous corolla.

COLOURED leaf. Of any other colour than green. Calyx, as in *Bartsia*.

COLUMELLA. The central pillar in a capsule. *Pars connectens parietes internos cum seminibus*. Philos. Bot. The part connecting the inside with the seeds. *A receptaculo adscendens, circumcirca semina affigens*. Delin. Pl. Taking its rise from the receptacle, and having the seeds fixed to it all round.

COLUMNAR (*Teres*). Like the shaft of a column. See *Teres*. Withering explains *Columnaris* to be a square pillar.

COLUMNIFERÆ (*plantæ*) or *columniferæ* (*flores*). The name of the thirty-fourth order,

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order, in the Fragments of a Natural Method, in Linneus's *Philosophia Botanica*: the thirty-seventh of his Natural Orders, at the end of *Genera Plantarum*: and the fourteenth order of Royen's System. It includes the Malvaceous, or Mallow-like plants; which are to be found in the class *Monadelphica* of Linneus's Artificial System.

COMA (*Κομη*, a head of hair). A species of bracte, terminating the stem in a tuft or bush. As in *Crown Imperial*; *Salvia Horminum*, *Sylvestris*, *Sclarea*, &c.—A spike of flowers terminated by a coma is named *Comose*: and plants with such flowers are ranged in the thirty-sixth of the Natural Orders, in Linneus's *Philosophia Botanica*.

COMMON bud (*communis gemma*). Containing both leaves and flowers. Common peduncle (*communis pedunculus*). Bearing several flowers.—Common perianth; inclosing several distinct fructifications, as in the class *Syngenesia*.

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Common receptacle ; connecting several distinct fructifications ; as in the same class.

COMPACT leaf. Having the pulp of a close firm texture.

COMPLETE flower. Furnished both with calyx and corolla. Delin. Pl.—This is one of Vaillant's terms. It would with more propriety be termed complete, when it has all the parts of a flower. See *Flower*.

COMPLICATE (*complicātus*). Folded together : as the valves of the glume or chaff in some grasses.

COMPOSITÆ, or COMPOSITI. The name of the twenty-first order in the Fragments of a Natural Method in Linneus's *Philos. Botan.*—the forty-ninth of the Natural Orders in his *Gen. Pl.*—in Royen's System, and others. Comprising the plants with compound flowers.

COMPOUND (*compositus*). Stem : dividing
into

into branches.—*Leaf*: connecting several leaflets on one petiole, which in this case is called a common petiole.—*Flower*: a species of aggregate flower, containing several florets, enclosed in a common perianth, and on a common receptacle; with the anthers connected in a cylinder; as in the class *Syngenesia*.—*Raceme*: composed of several racemules, or small racemes.—*Spike*: composed of several spicules or spikelets.—*Corymb*: formed of several small corymbs.—*Umbel*: having all the rays or peduncles bearing umbellules, or small umbels, at the top.—*Fructification*: consisting of several confluent florets; opposed to simple,

COMPOUND terms. Two terms forming one idea, much used by Linneus. It should be observed that these may be framed with propriety from figures, &c. of the same division only. Thus *lanceolate-ovate* and *ovate-lanceolate* are proper; but not *lanceolate-acute*, or *ovate-mucronate*.—Delin. Pl,

COM-

COMPRESSED or flatted (*compressus*). Applied to a stem, which has the two opposite sides plane or flat—to a leaf, which is pulpy, with the sides more flatted than the disk. Opposed to *depressed* in Delin. Pl.—Applied to a filiqua, which has the opposite sides approaching to each other.

CONCAVE leaf. When the edge stands above the disk: or, as Linneus expresses it, when the margin of the leaf being too tight to circumscribe the disk, the disk is depressed.— Applied also to the calyx and corolla; and to the valves of the glume in grasses.

CONCEPTACLE or Follicle (*Conceptaculum*, *Folliculus*). A Pericarp of one valve, opening longitudinally on one side, and having the seeds loose in it. As in *Apo-cynum*, *Asclepias*, *Stapelia*.

CONDENSED branches (*coarctati rami*). Pressed or squeezed together, so close, as almost

almost to be incumbent, or lie over each other, at their ends.

CONDUPLICATE, doubled together. *Conductuplicata vernatio* f. *foliatio*. A term in veneration or leafing; signifying, that in the bud, the two sides of the leaf are doubled over each other at the midrib. *Cum folii latera (intra gemmam) parallela sibi invicem approximantur*. As in *Rose, Ash, Walnut, Almond, Cherry, Oak, Beech, &c.*—It is used also in the sleep of plants (*conduplicans somnus*) in the same sense; when the leaves, during the night, fold together, like the leaves of a book.

CONE (*Conus*). The fruit of several evergreen trees, as *Fir, Pine, Cedar, Cypress*. Linneus has discarded this term, and has adopted that of *Strobilus*, which however is of more extensive signification; comprehending fruits, as of *Magnolia*, not called cones in common language. See *Strobilus*.

A *Cone* is broadest at the base, or next
the

the point of union with the branch, and tapers more or less to the end. It is composed of woody scales, usually opening, and has a seed at the base of each scale. Though Linneus has discarded the term Cone, he has retained an order of coniferous plants. See *Coniferæ*.

CONFERTUS. Crowded or clustered. *Conferta folia*; leaves so copious, as to occupy the whole of the branches, scarcely leaving any space between; as in *Antirrhinum monspessulanum* and *Linaria*. *Conferti rami*; branches so close, as scarcely to leave any space between them: opposed to *remoti*. *Confertus verticillus*, a close or crowded whorl, in which the peduncles, or flowers, are as it were squeezed together: opposed to *distans*.

CONFLUENT leaves (*folia Confluentia*), Thronging, *Witbering*. *Ad basin inter se cohærentia*; united at the base: growing in tufts, so as to leave the intermediate parts of the stem bare. *Confluent lobes*; running

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running one into another: in opposition to *distinct*.

CONFORME folium. A leaf in all parts the same. *Conformis torsio*. Twisting (of a stem) always the same way.

CONGESTUS, heaped together. *Congesta panicula*: a panicle which has a great abundance of flowers, but not so closely squeezed together as in the crowded or dense panicle.

CONGLOMERATE (*con* and *glomus*, a clue of yarn or thread) flowers or peduncles. When a branching peduncle bears flowers on very short pedicles, closely heaped and compacted together, without order. As in *Dactylis glomerata*. Opposed to *diffused*. See *Glomerate*.

CONIC or CONICAL *receptacle*. In shape of a cone, round and broad at the base, but drawing to a point at the top. As in *Bellis* (the common Daisy), *Anthemis*, &c.

CONI-

CONIFERÆ. The fifteenth order in Linneus's Fragments of a Natural Method: and the fifty-first of the Natural Orders; at the end of *Gen. Pl.* Containing the cone-bearing trees. As *Fir, Pine, Cypress, Thuja, &c.*

CONJUGATE leaf (*folium conjugatum*). A pinnate leaf which has only one pair of leaflets. *Conjugate raceme*: having two racemes only, united by a common peduncle.

CONNATE leaf (*folium connātum*). When two opposite leaves are so united at their bases as to have the appearance of one leaf: as in the *Garden Honeyfuckle*.—This term is applied also to filaments and anthers, united into one body; as in the classes *Monadelphica* and *Syngenesia*.

CONNIVENS corolla. *Cujus limbi lobi apicibus convergunt. Connivens somnus: quando duo folia opposita pagina superiore tam arcte ad se mutuo applicantur, quasi unicum esset*

effet folium.—*Conniventes antheræ.* See *Converging*.

CONTORTÆ (*Contorqueo, to twist together*).

The twenty-ninth order in the Fragments of a Natural Method, in *Philos. Bot.* and the thirtieth of the Natural Orders in *Gen. Pl. Lin.*

CONTORTA corolla. *Cujus petalorum margo alter incumbens alteri obliquam directionem habet.* A contorted corolla has the edge of one petal lying over the next, in an oblique direction. As in *Vinca*.—*Contortum pericarpium.* *Cujus apex non in eadem cum basi linea est.* A contorted pericarp is that, which has the apex in a different line from the base. This means no more than twisted.

CONTORTUPLICATUS. See *Writbed*.

CONTRACTA *panicula.* A contracted panicle. Close and narrow, so as very much to resemble a spike. As in *Festuca calycina*.

CONTRA-

CONTRARIUM *dissepimentum*. See *Partition*.

CONVERGING (*connivens*). Applied to the corolla, when the tips of the petals meet so as to close the flower; as in *Trollius*: to anthers, approaching or inclining towards each other; as in the class *Didynamia*: to the sleep of plants; when two opposite leaves are so closely applied to each other by their upper surfaces, as to seem one leaf.

CONVEX leaf (*folium convexum*). Quod in disco magis elevatum est. Philos. Bot.—*Margine disco arctiore (depressiore) ut elevetur discus*. Delin. Pl. Rising towards the centre; or, with the edge more contracted than the disk, so that the disk is raised.

This term in *Philosophia Botanica* is opposed to *depressed*, and has reference to the substance of a leaf; whereas in *Delin. Pl.* it refers to the mode of its expansion, and is opposed to *concave*. It is applied also to the *Receptacle*, which rises towards
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the middle: as in *Tansy*, *Chrysanthemum*,
Matricaria, *Buphtbalmum*.

CONVOLUTED (*convolutus*) leaf. *Foliorum lateribus cuculli in modum spiraliter contortis*. Delin. Pl. A term in vernation or foliation, signifying that the sides of the nascent leaves are rolled together like a scroll: as in *Arum*, *Piper*, *Solidago*, *Brassica*, *Prunus*, *Gramina* or *Grasses*.—This is applied also, in the same sense, to the petals and stigmas, as in *Crocus*.—*Tendril* (*Cirrus*). *In annulos contortus*, twisted into rings or spirals.

CONUS. See *Cone* and *Strobile*.

CORCULUM (dimin. from *Cor*, the heart).

The *corcle*, *heart*, or essence of the seed.

The rudiment of the future plant. Attached to and involved in the cotyledons.

Consisting of the *plume*, or scaly ascending part; and the *rostell*, or *radicle*, the simple descending part.—*Novæ plantæ compendium, connectens Cōtyledones; constans Rostello acuminato, deorsum germi-*

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nante;

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nante; *Plumula imbricata, sursum excre-
scente.* Regn. Veg.

CORDATE or heart-shaped leaf (*folium cor-
datum*). So called, from its resemblance
to a longitudinal section of the heart.—
Ovate or subovate, hollowed at the base,
without any angles there. *Ovatum, basi
excavatum, destitutum angulis posticis,*

Cordate-oblong. A heart-shaped leaf
lengthened out.

Cordate-lanceolate, Cordate-sagittate, &c.
Partaking of the form of both leaves.

CORIACEOUS. Stiff like leather or parch-
ment. Applied to the leaf, calyx, and
capsule.

CORNERED or *angular* stem: 3—6, cor-
nered (*trigonus, &c.*) Having three, &c.
prominent longitudinal angles.

CORNU. A horn or spur at the back of
some flowers. See *Horn*.

COR-

CORNUTUS. *Horn-shaped.*

COROLLA (dimin. from *corona*, a crown).

Liber plantæ in flore præsens. Philos. Bot.

& Delin. Pl. *Tegmentum interius floris e*

libro. Regn. Veg.—The second of the seven parts of fructification; or, the inner covering of the flower, formed, according to Linneus, of the *liber* or inner bark of the plant.

It may commonly be distinguished from the perianth, by the fineness of its texture and the gayness of its colours: whereas the perianth is usually rougher and thicker, and green. But there are many exceptions; the perianth in *Bartsia* is coloured—the corolla in *Daphne Laureola* is green.—Linneus makes the distinction between the *corolla* and *perianth* to consist, in the former having its segments or petals alternate with the stamens; whereas the latter has its parts or leaflets opposite to them. This appears from the inspection of the classes *Tetrandria* and *Pentandria*, in flowers which have both parts;

and of *Chenopodium*, *Urtica*, *Parietaria*, which have no corolla. See *Philos. Bot.* p. 57, § 90.

Adanson however observes, that in the Liliaceous plants, what is called a corolla is in reality a perianth, according to the principles of Linneus. That part which is named corolla of *Rhamnus*, in *Lin. Gen.* is called calyx in *Syst. Veget.*—and on the contrary, the calyx or perianth of *Polygonum* in *Lin. Gen.* is the corolla in *Syst. Veg.*

To get rid of the difficulty, which sometimes occurs in distinguishing the corolla from the calyx, De Necker has cut the knot, and called them by one name, *Perigynanda*; which signifies the envelope, cover or wrapper of the stamens and pistils; this he distinguishes into inner and outer, when there are two—then the first is the corolla, and the second the perianth.

I prefer *corolla* to *corol*, because it is a legitimate English word, as well as the
other,

other, with a better sound; but especially because it has generally obtained place among us. Some choose to translate corolla by *blossom*; but blossom has a more contracted signification in English, being usually applied to the flowers of fruit-trees. Beside this it is contrary to the principles that ought to regulate us in forming technical terms.

The Nectarium or Nectary is considered as a part of the corolla.

The corolla is frequently, but inaccurately, called the flower. See *Flower*.

The diminutive *Corollet* or *Corrollule* (*Corollula*) is used in speaking of the florets in aggregate flowers.

CORONA: See *Crown*.

CORONARIÆ. The ninth order in Linneus's Fragments of a Natural Method: and the tenth of his Natural Orders; containing part of the Liliaceous plants;

such as for their beauty are adapted to the making of garlands (*coronæ*).

CORONULA (dimin. of *corona*) a* coronet or little crown to the seed.

CORTEX (from *corium* a hide, and *tego* to cover). The *outer bark* of a vegetable, or the second integument within the epidermis; plated, lax, dry, hard, often in chinks.—*Secundum integumentum plantæ, laminosum, laxum, siccum, durius, sæpe rimosum.*

CORTICAL bud (*Corticalis gemma*). Having its origin from the scales of the bark—*e corticis ramentis.*

CORYDALES (from *κorys*, a helmet). The twenty-eighth order in Linneus's *Fragments of a Natural Method*, and the twenty-fourth of his *Natural Orders*.

CORYMB (*Corymbus*). Linneus's words are—*fit ex spica, dum singuli flores petiolis propriis instruuntur, situ elevato proportionali.*

tionali.—It is made up of a spike, whilst each flower is furnished with its proper petiole [peduncle], in an elevated proportional situation.—I confess that I do not clearly understand this explanation of the term.—In Lee's Introduction it is thus expressed—"Corymbus is a kind of
 " spike, the flowers of which have each
 " its proper Pedicellus, or partial foot-
 " stalk raised to a proportional height."—
 In Rose's Elements it stands thus—"The
 " *Corymbus*, where the lesser flower-stalks
 " of unequal lengths are produced along
 " the common peduncle on both sides,
 " and rise to the same height, so as to
 " form a flat or even surface at top."—
 Berkenhout says—"Linneus makes it a
 " species of inflorescence, in which the
 " flowers grow in clusters, each upon a
 " separate *pedunculus*, as in the siliquose
 " plants in general."—Rose's explanation
 is the most intelligible, but it is not Lin-
 neus's.—There is plainly a reference to
 the spike for the general similitude, with
 two distinctions.—1. That each flower is

not sessile, but on its proper pedicel.
 2. That instead of the flowers being ranged along a common simple peduncle alternately, as in the spike; each pedicel is of a length proportioned to its situation, so that all the flowers form nearly a flat surface at top. If this be not the sense intended by *situ elevato proportionali*, I am at a loss for a meaning.—After all, the meaning of the term will be best understood by attending to the manner of flowering in the plants referred to by Linneus. *Spiræa opulifolia*, *Ledum*, and those of the *Siliquose* or *Tetradynamia* class. A corymb may be either *simple* or *compound*. Corymbus, in Pliny, signifies a cluster of ivy berries—“*hederæ racemus in orbem circumactus*.” Columella puts it for the head of the artichoke.

“ Hæc modo purpureo furgit glomerata
 “ corymbo.”

It is a Greek word (*κορυμβος*), from *κορυς* a helmet, and that from *καρὰ* the head.

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This and two other kinds of Inflorescence, namely, the *Cyme* and *Umbel*, which bear some resemblance to each other, may be thus distinguished:

1. In the *Corymb*, the peduncles take their rise from different heights; but the lower ones being longer, they all form nearly an even surface at top.

2. In the *Cyme*, the peduncles take their rise from the same centre; but the subdivisions are irregular.

3. In the *Umbel*, the peduncles take their rise from the same centre, and the whole is disposed with a striking regularity.

CORYMBIFERÆ. The name of one of Ray's classes; and of the third subdivision in the order of compound flowers, in Linneus's Natural Arrangement.

COSTATUM folium. A ribbed leaf: as in *Echites sphilitica*.

Cottony.

Cottony. See *Tomentosus*.

COTYLEDON (κοτυλη, *a cavity*). The lobe, or placenta of the seed, destined to nourish the heart, and then to perish.—*Corpus laterale seminis, bibulum, caducum*. The lateral body of the seed, bibulous or imbibing moisture, and caducous or falling off quickly. Giseke defines it to be—*folium primum germinantis seminis*, but this is properly the seed-leaf.—In English we commonly call this part the *Cotyledon* or *seed-lobe*, when we speak of it as a portion of the seed, in a quiescent state—and the *seed-leaf*, when the seed is in a growing state.—The greater part of seeds have two lobes; some however have more—others only one, and others have none.—Hence a distinction of all plants into *Acotyledones, Monocotyledones, Dicotyledones, Polycotyledones*; which forms the basis of Jussieu's Natural Arrangement.

COWLED or *Cucullate* leaf (*folium cucullatum*). Wide at top, drawn to a point below,

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below, as in *Geranium cucullatum*: in shape of the paper rolled up conically by grocers for small parcels of spices, comfits, &c.

“ Vel thuris piperisque fis *cucullus*.”

Martial.

Hence, from a similitude in the form, this term was applied to the cowl, or large pendent cape of the upper garment, which turned up occasionally to cover the head.

“ Pullo Mævius alget in *cucullo*.”

Martial.

CREEPING root (*radix repens*). Extending itself horizontally, and putting forth fibres; as in *Mint*.—*Creeping stem* (*caulis repens*). Running along the ground, or up trees and other bodies, putting forth roots; as in *Ivy*, *Bignonia*, &c.

CRENATE, *scolloped* or *notched* leaf (*folium crenatum*, from *crena* a notch). *Cujus margo angulis neutram extremitatem respicientibus secatur*. Having the edge cut
with

with angular or circular incisures, not inclining towards either extremity: as in *Primula farinosa*.—When the edge of a leaf is cut into segments of small circles, instead of angular teeth, it is said to be *obtusely crenate*; when the larger segments have smaller ones upon them, a leaf is then said to be *doubly crenate*, *duplicato-crenatum*.—Linneus's definition in *Philos. Bot.* takes in only the *acutely crenate* leaf; and therefore *incisuris* is rightly substituted in *Delin. Pl.* for *angulis*.

The same term is applied to the corolla, in *Linum*, *Dianthus chinensis*, &c.—to the nectary, in *Narcissus triandrus*.

I think it, upon the whole, better to retain the Latin term; than to translate it by *notched*, which in our language does not take in the idea by which Linneus distinguishes *crenate* from *ferrate*; namely, the direction of the teeth or notches. See *Serratus*.

When the edge of a leaf is cut into very small notches, Linneus uses the diminutive

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diminutive *Crenulate* (*crenulatum*). This term is also applied to the nectary in *Narcissus poeticus*.

CRESCENT-SHAPED (*lunatus*, from *luna*, the moon). Roundish, hollowed at the base, with posterior angles. *Subrotundum basi excavatum, angulis posticis notatum* — Applied to leaves and spikes: as in *Acrostichum pectinatum*. The diminutive *lunulata* is applied to the keel of the flower in *Polygala myrtifolia*. — *Moon-shaped* is absurd, and *Mooned* is abominable. If the terms *lunate* *lunulate* or *crescent-shaped* be objected to, we may use the periphrasis, *shaped like a crescent*, for any form of a leaf, &c. resembling the moon in any period of her first quarter; since this term does not occur very frequently.

CRESTED (*cristatus*). Having an appendage like a crest or tuft: as the flower of *Polygala* and some anthers.

CRINITUS (*crinis*, hair). *Crinite*. Hairy,
or

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or having long hair, or beards resembling hair; as in *Pbleum crinitum*.—Applied also to *Fronde*.

CRISPUM folium. A curled leaf. *Cum peripheria folii major evadit, quam discus admittit, ut undulatum fiat.* Philos. Bot. p. 45.—*Cum foliorum peripheria augetur, ut circumcirca fluctuet quasi undatus limbus,* p. 217.—*Margine luxuriante ut discus evadat longior sua rachi.* Delin. Pl. See *Curled*.

CRISTATUS. See *Crested*.

CROSSWISE (*cruciātim*). This term is applied to leaflets in a whorl, when there are four of them forming a cross—also to anthers; as in *Glecoma* and *Hippomane*.

Cross-armed. See *Brachiate*.

CROWDED. See *Confertus*.

CROWN of the seed (*corona seminis*). An appendage to the top of many seeds, enabling

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enabling them to disperse. This is either the calycle, as in *Scabiosa*, *Knautia*, *Ageratum*, *Arctotis*—or a Down (*Pappus*), as in *Hieracium*, *Sonchus*, *Crepis*, *Scorzonera*, *Tragopogon*, &c.

CRUCIFORM or *cross-shaped* corolla (*cruciformis* f. *cruciata*). Consisting of four equal petals, spreading out in form of a cross. *Petalis quatuor æqualibus patens*: in Delin. Pl. is added, *ungue quam lamina longiore*—the claw longer than the border.—These flowers constitute the fifth class in Tournefort's System; and are a principal character in the class *Tetradynamia* of Linneus. In the Natural Orders he has preferred the title of *Siliquosæ*.

CRYPTOGAMIA (*κρυπτος* and *γαμος*, *concealed nuptials*). The name of the twenty-fourth class in the Linnean Artificial System, comprehending the vegetables whose fructification is concealed, or at least too minute to be observed by the naked eye.—It is divided into four orders.

I. *Filices*

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1. *Filices* or Ferns. 2. *Musci* or Mosses.
3. *Algæ* or Flags. 4. *Fungi*.

CUBIT (*cubitus, cubitālis mensura*). A measure from the elbow to the extremity of the middle finger—seventeen Paris inches—a foot and a half English.

CUCULLATUM folium. *Lateribus ad basin conniventibus, apice vero dilatatis: ut in Geranio cucullato.* See *Cowled*.

CUCURBITACEÆ (*Cucurbita*, a Gourd). The forty-fifth order in Linneus's *Fragments of a Natural Method*; and the thirty-fourth of his *Natural Orders*.

CULM (*Culmus*). The stalk or stem of Corn and Grasses; usually jointed and hollow; supporting both the leaves and fructification. *Truncus graminibus proprius, elevat folia fructificationemque, plerumque geniculatus, articulis inanibus.*—The word *straw* being commonly appropriated to the dry stalk of corn, I prefer using the Latin *culm*. The old term in English is *blade*.

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CULMINIÆ (*Culmen*, the top). The twenty-sixth order in Linneus's Fragments of a Natural Method.

CUNEIFORME *folium*. A cuneiform or wedge-shaped leaf. *Cujus diameter longitudinalis superat transversalem, & sensim deorsum angustatur.* See *Wedge-shaped*.

CURLED leaf (*folium Crispum*). When the periphery is larger than the disk admits, and so becomes waved—or, is so luxuriant, that the disk is longer than the rib of the leaf: as in *Curled Parsley*.—All curled leaves are monsters, or productions of art.

Curled nectary (*nectarium crispum*): as in *Narcissus Pseudonarcissus* and *minor*—which have their cups waved or curled about the edge.

CURVED, bowed, or bent inwards (*incurvus*). Applied to Legumes and Prickles.—*Caulis incurvatus, introrsum nutans.* A stem curved or nodding inwards.

Curved, or *bowed outwards, backwards* or *downwards* (*recurvus, recurvatus*).
Applied to Leaves and Prickles.

CUSPIDATUM *folium* (*cusps*, the point of a sword or spear). A *cuspidate* leaf. Having the end sharp, like the point of a spear—or, terminating in a bristly point *Terminatum apice setaceo rigidiusculo*.

CYATHIFORMIS (*cyathus*, a drinking-cup or glass). *Cum ex cylindro superne parum dilatatus est*. Cyathiform, Glass-shaped or Cup-shaped. Cylindric, only widening a little at the top.—Applied to the calyx in *Mauritia*—to the corolla—and to *Peziza Acetabulum* and *cyathoides*.

CYLINDRICAL. Applied to stems, and some leaves, which are round (*teretes*), that is without angles; but many times longer than they are thick. This is more properly expressed by *columnar*, because they are not of the same diameter from top to bottom.

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bottom. The same term is applied to the calyx; as in *Euphrasia*, *Dianthus chinensis*, &c.—to the style—and to the spike.

CYMBIFORMIS. See *Boat-shaped*.

CYME or CYMA (*Κύμα, fœtus*). It signifies properly a sprout or tender shoot, particularly of the cabbage.—Dr. Withering calls it a tuft.—Linneus explains it to be an aggregate flower composed of several florets sitting on a receptacle, producing all the primary peduncles from the same point, but having the partial peduncles scattered or irregular; all fastigate, or forming a flat surface at top. As in *Opulus*, *Cornus sanguinea*, *Ophiorhiza*.—*Flos aggregatus ex flosculis pluribus insidentibus receptaculo, in pedunculos fastigiatos, primores ex eodem puncto productos, posteriores autem sparsos.* Philos. Bot. p. 78.—*Receptaculum ex centro eodem universali, partialibus vero vagis, elongatum in pedunculos fastigiatos,* p. 55. *Umbella composita ramulis alternis.* Regn.

Veg. The Cyme is either *naked*, or with *bractes*. See *Corymb*.

Flowers disposed in a Cyme are called *Cymose* flowers.—Hence

CYMOSE. The sixty-third of Linneus's Natural Orders in *Philosophia Botanica*.

D

DÆDALEUM *folium*. A Dædal leaf.—*Unà flexuosum lacerumque*.—At the same time flexuose and lacerated; or winding and torn.

DAGGER-POINTED, *Dagged* or *Mucronate*; ending in a point like that of a dagger.—Applied to the leaf of *Bromelia Ananas*: and to the calyx.

DECAGYNIA (*deka ten*, and *gynē a woman or wife*). Ten-styled. The name of one
of

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of the orders in Linneus's Artificial System; comprehending those flowers which have ten styles. This occurs only in the class *Decandria*.

DECANDRIA (*δεκα* *ten*, and *ανηρ* *a man or husband*). Ten stamened. The name of the tenth class in Linneus's Artificial System; comprehending all hermaphrodite flowers with ten stamens.—It is also the name of an order in the classes *Monadelphica*, *Diadelphica*, *Gynandria*, and *Diæcia*.

DECAPHYLLUS calyx. A decaphyllous or ten-leaved calyx; as in *Hibiscus*.

DECEMFIDUS calyx. Cut into ten parts. A ten-cleft calyx, or rather perianth. As in *Potentilla* and *Fragaria*. See *Cleft*.

DECEMLOCULARE *pericarpium*. A ten-celled pericarp or seed-vessel: as in *Linum*.

DECIDUOUS (*Decidūus*) Leaf: falling off in the autumn. *Deciduum folium*: per-

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acta unica æstate casurum.—Calyx or perianth: falling after the corolla opens. *Deciduum perianthium: post floris explanationem cadens*. As in *Berberis*, and the class *Tetradynamia*.—Corolla or petals: falling off with the rest of the flower. *Decidua corolla: cum floris casu*.—Applied also to stipules; as in *Padus*, *Cerasus*, *Populus*, *Tilia*, *Ulmus*, *Quercus*, and many other trees—Bractes—and Legumes. See *Caducous*.

DECLINATUS *caulis*. A declined or declining stem. *Arcuatim descendens*. Descending archwise. The least degree of curvature towards the earth. Opposed to ascending.—Applied also to the Peduncle—Stamen—and Style.—*Declinatum folium*. A declined or declining leaf. *Deorsum flexum instar carinæ naviculæ*. Bent downwards like the keel of a boat.

DECOMPOUND *leaf*. *Folium decompositum*. When the primary petiole is so divided that each part forms a compound leaf.—The different kinds of the decompound leaf

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leaf are—*Bigeminate*, *Biternate*, and *Bipinnate*: which see in their proper places.—Applied sometimes to an umbel (*umbella decomposita*), which is otherwise called *Proliferous*.—Flower (*decompositus flos*): compounded of compound flowers, or containing within a common calyx smaller calyxes, common to several flowers; as in *Sphæranthus*, &c. contained in the order *Segregata* of the class *Syngenesia*.

DECUMBENT flower. *Decumbens flos*. Having the stamens and pistils declined or bending down to the lower side of it: as in *Cassia*—Stem: *caulis decumbens*, lying on the ground with the base higher than the other parts.

DECURRENT leaf. *Folium decurrens*. A sessile leaf having its base extending downwards along the stem. As in *Symphytum*, *Verbesina*, *Carduus*, *Sphæranthus*.—Applied also to the petiole, and the stipule.

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DECURSIVELY-PINNATE leaf. *Folium decursive pinnatum.* Having the leaflets decurrent, or running along the petiole.

DECUSSATED leaves and branches. *Decussata folia. Decussati rami.* Growing in pairs, which alternately cross each other at right angles; so that if the stem be viewed vertically, or the eye be directed right down it, the leaves or branches will appear to be in fours.

DEFLEXUS ramus. A *deflected* branch. *In arcum deorsum inclinatus.* Delin. Pl. Bowed or bending down archwise.

DEFLORATUS. Having discharged the *Farina* or Pollen.

DEFOLIATIO. Defoliation, or shedding the leaves.—*Tempus autumnale, quo arbores folia dejiciunt, eoque indicant progressum autumnii & insequentis hyemis.*—Here Linneus puts it, not for the action of unleafing, or shedding leaves; but for the season

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season in which this action is performed.

—So

DEHISCENTIA, the gaping or opening of capsules, is also put for the season in which this usually happens.

DELTOID leaf. *Folium deltoïdes*, or *deltoideum*.—*Rhombeum ex quatuor angulis, e quibus laterales minus a basi distant quam reliqui*.—Shaped like a rhomb, having four angles, of which the lateral ones are less distant from the base than the others.

I must confess that I do not understand this description; for of the two remaining angles, (*reliqui*) one is at the base of the leaf; and the lateral angles cannot be at a less distance from the base than the base itself is. Nor will the figure of a deltoid leaf given at n. 58. in *Philosophia Botanica* at all assist us; for that is by no means a plane leaf, but one of the succulent kind, such as we find in the genus *Aloe*, *Mesembryanthemum*, &c. and yet

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yet it has no resemblance to those of *M. deltoides*.

I either mistake Linneus's meaning, or we must admit of some alteration in the terms of his description. If instead of *reliqui* we read *reliquus*; then the sense of the words will be—that *the lateral angles are nearer to the base, than the apex is to the same base*. This is true, but not sufficiently descriptive of a deltoid leaf.—If for *reliqui* we read *a reliquo*; then the meaning will be—that *the lateral angles are at a less distance from the base than they are from the apex*; and therefore the lower sides of the rhomb, connecting the lateral angles with the base or point of insertion of the petiole, must be shorter than the upper sides, connecting the same lateral angles with the apex of the leaf, or angle opposite to the petiole. This sense agrees sufficiently with the form of those leaves which are given as instances of the deltoid leaf.—But I own it would give me more satisfaction if we might be permitted for *base* to substitute *se invicem*.

Then

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- Then the full meaning of the definition would be this—a *Deltoid leaf* has the general appearance of a delta or triangle, but in reality it approaches in figure to a rhomb, and like that has four angles, of which the two side ones are always nearer to each other than the two others at the base and apex; so that the length of the leaf is somewhat greater than the breadth. —All this will be best understood by examining a leaf of the common *Black Poplar*, which is given as one instance of a deltoid leaf in Linneus's *Specific Characters*. Other instances are, several species of *Chenopodium* and *Atriplex*: *Cochlearia danica*: *Alyssum sinuatum* and *deltoideum*. —If it should be objected, that a leaf cannot have the form both of a delta and a rhomb; I reply that Linneus affirms no more than that this leaf has the appearance of a delta, with a resemblance to a rhomb; and that it would be absurd to expect mathematical exactness in substances so various in their forms as leaves. Dr. Withering translates *deltoideus* tri-
angularly

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angularly spear-shaped ; and says, that leaves in this form are broad at the base and nearly triangular, but spear-shaped at the point ; as in the Black Poplar.

With respect to *Mesembrianthemum deltoides*, there is no doubt but that it was so named, because each side of its succulent leaves is in form of a triangle, and therefore corresponds with the figure of the Greek letter *delta*.

DEMERSUM *folium*. A *demerse* leaf. Growing below the surface of the water. Frequent in aquatic plants. The same with *Submersum*.

DENSE panicle. *Densa panicula*. Having abundance of flowers very close. A greater degree of *congesta*, heaped.

DENTATA (*Dens*, a tooth) *radix*. A toothed root. *Moniliformis, ex articulis concatenatis*. Consisting of a concatenation of joints, resembling a necklace.

DENTA-

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DENTATUM folium. A *toothed* leaf. *Quod acumina horizontalia, folii consistentia, spatia remota habet.* Having horizontal points, of the same consistence with the leaf, with a space between each.—Dr. Berkenhout observes, that if, instead of horizontal, Linneus had written, *in the plane of the disk*, it would have been more intelligible.—In *Delin. Pl.* it is—*marginē acuminibus patentibus remotis*, having spreading points [or teeth], remote from each other, about the edge.—Exemplified in *Leontodon hastile, autumnale, alpinum, hispidum, hirtum. Primula veris & minima. Epilobium montanum.*

Dentato-sinuatum. Toothed, and at the same time with sinuses, bays or large hollows about the edge. *Tooth-sinuate.*

This term is applied also to the stipule
—*Stipula dentata.*

DENTICULATUS (*denticŭlus*, dimin. from *dens*). *Toothletted*, having small teeth or notches. Applied to the leaf; as in
Hesperis

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Hesperis matronalis, *Leontodon Taraxacum*,
Epilobium tetragonum.—To the calyx—
 and to the seed; as in *Bidens*.

DENUDATÆ (*denūdōr*, to be stripped naked). The seventh of the Natural Orders, in Linncus's *Philos. Bot.* comprehending a few genera which have flowers that appear at a different time from the leaves, and therefore have a naked appearance; as *Colchicum*.

DEPENDENS folium. A leaf hanging down; or, pointing directly to the ground. *Quod recta terram spectat*.—Applied also to the sleep of plants (*dependens somnus*); when the leaves, which are erect in the day, hang down at night.

DEPRESSUM folium. A depressed leaf.—
Quod in disco magis deprimitur quam ad latera. Hollow in the middle; or, having the disk more depressed than the sides. This term has reference to succulent leaves only; and is opposed to
Convex,

Convex, in Philos. Bot. and to *Compressed*, in Delin. Pl.

Applied also to seeds; as in *Cynoglossum*.

Dextra torsio, and *Dextrorsum volubilis*. See *Torsio* and *Twining*.

DIADELPHIA (from *dis* twice, and *adelphos* a brother). *Two brotherhoods*. The name of the seventeenth class, in Linneus's Artificial System; comprehending those plants which bear hermaphrodite flowers, with two sets of united stamens.—This is a natural class, with papilionaceous or pea flowers, and leguminous fruits. It is nearly the same with the *Papilionacei* of Tournefort; the *Irregulares Tetrapetalæ* of Rivinus, and the *Leguminosæ* of Ray. The orders are founded on the number of the stamens; and ten being the predominating number in this class, the order *Decandria* is much the largest. The regular disposition of the stamens in
this

this order is, nine united in one brotherhood, the lower broad part of the filament sheathing the germ; and the tenth single; but in almost twenty genera the ten stamens are connected into one body at bottom.

DIADELPHOUS stamens. *Stamina diadelpba.*
stamens forming two brotherhoods. The filaments united in each of the two sets at bottom, but separate at top.

DIAGNOSIS *plantæ consistit in affinitate generis & in discrimine speciei.*—The diagnosis of a plant consists in the affinity of the genus, and the difference or distinction of the species. The specific characters in the *Species Plantarum*, *Systema Vegetabilium*, and other works of Linneus, are true diagnoses.

DIANDRIA (*dis*, and *ανηρ* a husband). The second class of Linneus's Artificial System, comprehending all hermaphrodite flowers, which have two stamens.—Also the name
of

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of an order, in classes *Gynandria*, *Monœcia*, *Diœcia*.

Haller calls such plants *Distemones*.

DICHOTOMOUS stem. *Caulis dichotomus* (*διχα* and *τεμνω*, to divide by pairs). Continually and regularly dividing by pairs from top to bottom. As in *Viscum* or *Mistleto*, *Valeriana Locusta*. I prefer anglicising the Latin term, to translating it by *forked*; because this gives the idea of a single division only, and is expressed by another Latin word, *furcatus*.

When applied to a peduncle, as in *Melissa Calamintha*, this term may with more propriety be rendered by *forked*; because it seldom proceeds to a second subdivision.

Dichotomous-corymbed. Composed of corymbs, in which the pedicles divide and subdivide in pairs. As in *Achyranthes corymbosa*, which is distinguished by having—*panicula dichotomo-corymbosa*.

DICOCOCCOUS or *two-grained capsule* (*capsula dicocca*). Consisting of two cohering grains or cells, with one seed in each.

DICOTYLEDONES. Those plants which have seeds that split into two lobes in germinating.

DIDYMA (*δίδυμος, twin*) *anthera, capsula, bacca*.—*Duobus nodis extus protuberantes*.—*Didyma capsula, bacca, eadem ac dicocca esse videtur*. See *Twin*.

DIDYNAMIA (*δὶς twice, and δύναμις power*). The name of the fourteenth class in Linneus's Artificial System, comprehending those plants which have hermaphrodite flowers, with four stamens in two pairs of different lengths; the outer pair longer, the middle pair shorter and converging. These flowers have one pistil; and the corolla is irregular—either *ringent* or *personate*.

It is a natural class, containing the *Labiati* and *Personati* of Tournefort, and the *Monopetali irregulares* of Rivinus.

Linneus

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Linneus has divided it into two orders:

1. *Gymnospermia*, or such as have naked seeds.
2. *Angiospermia*; such as have the seeds enclosed in a vessel.

DIFFORMIS flos of Jungius and Knaut—*Anomalous* of Tournefort—*Irregularis* of Rivinus.—Linneus adopts the latter term. A difform, anomalous, or irregular flower, or corolla.—*Partibus nec magnitudine nec proportionē partium sibi respondentibus*. The parts of which do not correspond either in size or proportion.

Difformis torsio. The twisting of a stem one way and then another. See *Twining*.

Difformia folia. Difform leaves. *Diversæ figuræ in eadem planta*. Of different shapes on the same plant. As in *Ranunculus aquatilis*, *Rudbeckia triloba*, *Euphorbia heterophylla*, *Lepidium perfoliatum*, *Hibiscus virginicus*, *pentacarpos*, *Sabdariffa*.

It is observable, that Aquatic plants sometimes have the leaves under water

finely cut, whilst those above water are not so. On the contrary, in mountain plants, the upper leaves are usually most cut.

DIFFUSED stem. *Caulis diffusus*. Having spreading branches—*ramis patentibus*; as *Teucrium Scordium*.—Panicle. *Diffusa panicula*, hanging loose: opposed to *coarctata* close or compact. *Cum laxe divaricantur pedicelli, angulis rectis sive obtusis*. When the pedicels are spread about loosely, at right or obtuse angles with the main peduncle.

DIGITATE leaf. *Folium digitatum*. (Fingered leaf. *Lichf. Soc.*) When a simple or undivided petiole connects several distinct leaflets at the end of it. *Cum petiolus simplex apice adnectit foliola plura*. This is a sort of Compound leaf; whereas the *Palmate*, which in some measure resembles it, is a simple leaf. The Digitate leaf, to correspond with the name, should have five leaflets spreading out like the open fingers: but Linneus makes *binate, ternate*

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nate and *quinate* leaves to be species of the digitate; and the leaves of Horse-chestnut, though they have more leaflets than five, are nevertheless called digitate.

DIGYNIA ($\delta\iota\varsigma$ and $\gamma\upsilon\gamma\eta$). The name of an order in Linneus's Artificial System, comprehending those plants which have two pistils to a flower. This order is the second in the first thirteen classes, except the ninth.

DIMIDIATUS. See *Halved*.—*Dimidiata Spatha, latere tantum interiore fructificationem obvestiens*.—*Dimidiatum Capitulum, ab altero latere rotundum, ab altero planum*.—*Dimidiatum involucrum, f. involucellum, extrorsum situm, estque patens vel dependens*: ut in *Æthusa*.

DIOICA ($\delta\iota\varsigma$, and $\omicron\iota\kappa\omicron\varsigma$ a house) *planta*. A *diœcous* plant. Having male and female flowers on distinct individuals. Hence

DIÆCIA. The name of the twenty-second class in Linneus's Artificial System, com-
K 3
prehending

prehending those plants which have no hermaphrodite flowers; but male and female flowers on distinct individuals.—*Mares & fœminæ habitant in diversis thalamis & domiciliis.*

DIPETALOUS (*dipetăla*) corolla, or two-petalled; having two petals only: as *Circæa*, *Commelina*.

DIPHYLLOUS (*δισ*, and *φυλλον* a leaf) or two-leaved calyx: as in *Papaver* and *Fumaria*.—Applied also to the *cirrus* or tendril, as in *Lathyrus*—and to the peduncle, as in *Gomphrena*.

DISK of a leaf. The whole surface—*superius*, the upper—*pronus*, the under surface.—*Disk* of a flower, is the central part in radiate compound flowers, consisting generally of regular corollules or florets: it is applied to other aggregate flowers, when the florets towards the middle differ from those in the circumference; as in umbels.

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DISPERMUS fructus, *qui duo tantum semina continet.* A *dispermous* or *two-seeded* fruit; containing two seeds only; as in *umbellate* and *stellate* plants.

DISSECTUM folium. A *gashed* leaf (*dissected* is not proper).—In *Philos. Bot.* p. 219. Linneus gives *incisum* f. *dissectum* as a superseded term, and refers to *Laciniatum*, which he thus explains, in p. 43, —*varie sectum in partes, partibus itidem indeterminate subdivisis.* See *Gashed* and *Laciniatus*.

In *Delin. Pl.* the *Gashed* leaf is distinguished from the *Lacinate*, by the sections being *determinate* in the first, and *indeterminate* in the second.—*Dissecta* f. *incisa* [folia] *sectiones continentia plerumque numero determinatas.*

DISSEPIMENTUM. *Paries quo fructus interne distinguitur in concamerationes plures.* See *Partition*.

DISSILIENS pericarpium. A *diffilient*, *bursting* or *elastic* pericarp or fruit. *Bursting*

D I

open with a spring; as in *Hura*, *Dentaria*,
Cardamine, *Momordica* *Elaterium*.

DISTANS f. *remōtus* verticillus, *pedunculis remotis*. A distant whorl; when the flowers which compose it, being few in number, are remote from each other.

Applied also to stamens (*stamina distantia*), as in *Mint*.

DISTICHUS (δισ, and στίχος row or rank).

Two-ranked.—*Distichus caulis: ramos situ horizontali, nec decussatim sitos exserens*.—

A distich or two-ranked stem or stalk: putting forth branches, not decussated, but in a horizontal position.—*Disticha folia: duo latera rami tantum respicientia, licet undique inserta*.—Respecting two sides of the branch only, though inserted on all parts of it: as in *Fir* and *Diervilla*. Or, pointing two ways only, though not in the same plane.

This term is applied in the same sense to a spike (*spica disticha*); *floribus ad utrumque latus spectantibus*: all the flowers
pointing

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pointing two ways. Opposed to *Secunda*.
 —*Spica tetraſtica*, a four-ranked ſpike—
hexaſtica, a ſix-ranked ſpike.

DISTINCT leaves. *Folia diſtincta*. Quite ſeparate from each other. Contracted wite *connate* : as in ſeveral of the *Mefembryanthema*.—*Foliola diſtincta*. Diſtinct leaflets, as in *Jasminum officinale*; contracted with *confluent*, as in *J. grandiflorum*.—*Antheræ diſtinctæ*. Diſtinct or ſeparate anthers, as in moſt flowers; contracted with *connate*.

DIVARICATE (Straddling. *With*). Standing out wide. *Divaricati rami* : *a trunco ad angulum obtuſum diſcedentes*. Divaricate branches; making an obtuſe angle with the ſtem. Opposed to *Coarctati*. Philoſ. Bot. p. 233.—*Divaricata panicula* : a divaricate panicle; when the pedicels form an obtuſe angle with the main peduncle.—Applied in the ſame ſenſe to *peduncles* and *petioles*.

DIVERGING branches. *Divergentes rami*.
 Making

Making a right angle with the stem.
A trunco ad angulum rectum discedentes.
 —Applied also to the sleep of plants.
Divergens somnus: when the leaflets,
 in their state of repose, approach each
 other at the base, but spread out at the
 tips.

DODECANDRIA (*δωδεκα twelve*, and *ανη a husband*). Twelve-stamened. The name
 of the eleventh class in Linneus's Artificial
 System; comprehending all those plants
 which have hermaphrodite flowers with
 from twelve to nineteen stamens inclu-
 sive.

DODRANS *f. dodrantalis mensura*. The
 space between the end of the thumb and
 of the little finger, both extended. About
 nine Paris inches. This measure may
 be called in English the *long span*, and
spithama the short span. See *Measures*.

DOLABRIFORME folium (*Dolabra, an axe*,
a dolando). A *dolabriform*, *axe* or *hatchet-*
shaped leaf. *Battledore-shaped*. With.—
Compressum,

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Compressum, subrotundum, obtusum, extrorsum gibbum acie acuta, inferne teretiusculum. Compressed, roundish, obtuse, gibbous on the outside with a sharp edge, roundish below. As in *Mesembryanthemum dolabrisforme*.

DORSAL awn. *Dorsalis arista.* Fixed to the back or outer side of the glume, not springing from the end: as in *Bromus* and *Avena*.—*Lateri exteriori glumæ imposita.*

DOTTED leaf. *Folium punctatum.* Besprinkled or pounced with hollow dots or points. *Quod punctis excavatis adpersum est.* As in *Anthemis maritima*. Applied also to the receptacle; as in *Leontodon*, *Cacalia*, *Ethulia*, *Xeranthemum*, *Chrysanthemum*, *Othonna*.

DOUBLE. *Geminus.*—*Double leaves.* Two connected by one petiole.—*Double stipules.* Two and two by pairs.—*Double peduncle.* Two from the same point.
Different

D O

Different from *Two-flowered*, and *Twin*, which see.

Doubled together. See *Conduplicatè*.

Doubly-compound. See *Decompound*.

Doubly-crenate leaf. *Duplicato-crenatum folium*.—Having small notches on the larger.

Doubly-pinnate. See *Bipinnate*.

Doubly-ferrate. *Duplicato-ferratum*. Having small teeth on the larger.

Doubly-ternate. See *Biternate*.

DOWN is properly the English term for some sorts of pubescence; but it is used also for the *Pappus* or little crown, fixed on the top of some seeds, by which they fly: as *Dandelion*, *Thistle*, &c. This is, 1. feathered or plumose—or else, 2. capillary, hairy or simple. *Corona pennacea, pilosave volitans*. Some of these crowns are stiped, other sessile.—Down ought not

not to be used in both senses. *Pappus* cannot well make an English word. *Feather* is not proper, for we cannot say—a *feathered* feather, and a *hairy* feather. Seed-Down will distinguish it from Pubescence. See *Pappus*.

Downy leaf. See *Tomentosus*.

DROOPING (*cernuus*). The top or end pointing to the ground. Applied to the peduncle or flower; as in *Bidens cernua*.—Different from nodding, *nutans*; which see.

DRUPA. *Pericarpium farctum e valve, nucem continens.* A *Drupe* is a pulpy pericarp or fruit without valves, containing a nut or stone with a kernel. As *Plum*, *Apricot*, *Peach*, *Almond*, *Olive*, &c. Some call this sort of fruit *Prunus* or *Plum*. It is usually a moist succulent fruit; but sometimes dry, as the *Almond*.

DRUPACEÆ. The thirty-eighth order in Linneus's Fragments of a Natural Method:

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thod: containing those trees which bear a drupe or plum.

DUMOSÆ (*dumus*, a bush). The nineteenth order in Linneus's Fragments, in *Philos. Bot.* and the forty-third of the Natural Orders in *Gen. Pl.*

DUPLICATO-CRENATUM. *Doubly-crenate.*

DUPLICATO-PINNATUM. *Doubly-pinnate*
or *Bipinnate.*

DUPLICATO-SERRATUM. *Doubly-ferrate.*

DUPLICATO-TERNATUM. *Doubly-ternate,*
or *Biternate.*

DURATION of plants. The continuance of their life or existence.—As *Cadūcous* or quickly perishing. *Ephemēral*, creatures of a day. *Annual*, *Biennial*, *Perennial*.

EARED.

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EARED. *Auritus, Auriculatus* (*auris*, an ear). Having an appendage like a little ear. Exemplified in the *leaf—leaflet—* and *frond*.—*Aurita folia: cordata ceterum, sed angulis prominentibus rotundatis.* Eared, or more properly Ear-shaped leaves are cordate or heart-shaped, but have the corners prominent and rounded. *Delin. Pl.*—*Auriculata folia; lobo laterali minore prope basin aucta.* *Jungermannia, Leers Nomencl.*—with the addition of a smaller lateral lobe near the base. This is the proper sense of *auritus* or *auriculatus*.—*Auriculatum foliolum: twisted into the form of a little ear, as in Jungermannia ciliaris. Berkenb.*—We have instances of Eared Fronds in *Acrostichum punctatum. Polypodium Pica, marginale.*

The diminutives *Earlet* and *Earletted* seem scarcely necessary.

EBRACTEATUS *racemus, pedunculus.* A
raceme

raceme or peduncle, without any bracte or floral leaf; as in *Cistus guttatus*.

ECALCARATA corolla. A corolla without any spur, or spur-shaped nectary. As in *Wolfenia*.

ECHINATUM *pericarpium*. An echinated or burry pericarp. Beset with prickles like a hedge-hog (εχινος). As in *Datura Stramonium*.—Prickly is the proper translation of *aculeatus*.

ECHINUS. A Burr, or prickly pericarp.

EFFLORESCENTIA. Flowering season.—The time of the month in which different sorts of plants first shew their flowers.

EGG-SHAPED (Ovatus). See Ovatum.—I cannot approve of *Egged*.

EGLANDULOSUS *petiolus*. A petiole without glands.

EGRET. From *Aigrette*, the French term for the Pappus, Down, or feathery Crown of some seeds. See *Pappus*.

EIGHT-

EIGHT-PETALLED corolla; or consisting of eight distinct petals. *Octopetāla corolla*: as in *Mimusops*.—When it is only deeply divided into eight parts, it is said to be *eight-cleft* or *octofid*; (corolla octofida) as in *Fuchsia* and *Chlora*.—We have an example of an *eight-cleft* calyx (calyx octofidus) in *Tormentilla*.

ELASTIC pericarp. Throwing open, or casting off its valves with a spring, as in *Dictamnus albus*. Not different from *Diffiliens*; which see.

ELLIPTIC leaf. *Folium ellipticum*. Lanceolate, but with the breadth of an ovate leaf. *Lanceolatum latitudine ovati folii*. Delin. Pl.—In Philos. Bot. it is made synonymous with *ovale*.—Both the elliptic and oval leaf are in the form of an ellipse; and it appears to me that the former differs from the latter only in being more oblong; and yet broader than the lanceolate leaf.

EMARGINATE. *Emarginātum.* Notched at the end. End nicked, *Lichf. Soc.* Applied to the leaf—to the corolla, as in *Agrostemma coronaria*, &c.—and to the stigma: as in the class *Didynamia*.—*Quod terminatur crena.*

EMBRACING or stem-clasping leaf. *Folium amplexicaule.*

Empalement. See *Calyx*.

END-BITTEN. *Præmorsus.*

End-nicked. See *Emarginate*.

ENERVIUM f. *enerve folium.* A nerveless leaf. Having no apparent nerves. Opposed to *nervosum*.

ENNEANDRIA (*εννεα nine*, and *ανηρ a husband*). Nine-stamened. The name of the ninth class in the Artificial System of Linneus; comprehending such plants as bear hermaphrodite flowers with nine stamens.—Also of an order in the classes *Monadelphica* and *Diæcia*.

ENNEA-

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ENNEAPETALA corolla: A nine-petalled corolla: or, a flower of nine petals: as in *Thea viridis*, *Magnolia*, and *Liriodendron*.

ENODIS. Knotless. Without knots or joints. In opposition to *nodosus* knotted.—*Enodis culmus: qui continuus est, nec articulis interceptus.*—As in *Schænus*, *Cyperus*, *Scirpus*.—*Nodum in Scirpo quærere*, is proverbial.

ENSATÆ (*ensis*, a sword). The fifth order in Linneus's Fragments, and the sixth in the Natural Orders at the end of *Gen. Pl.* Containing some of the Liliaceous plants, which have sword-shaped leaves.

ENSIFORM leaf (*folium ensiforme*). Sword-shaped, or sword-form.—Ancipital or two-edged, tapering from the base towards the point. As in some species of *Ixia*, *Gladiolus*, *Iris*, &c.—*Anceps, a basi versus apicem adtenuatum*.

ENTIRE. *Integer.*—Stem: quite single with

scarce any branches. *Simplicissimus, ramis vix ullis.* Philof. Bot.—In Delin. Pl. it is explained to be, *Simplicissimus, ramis angustatis*; and simplicissimus is *ramis vix ullis*; whereas simplex is defined to be, *continua serie virsus apicem extensus*: that is, the *simple* stem has no branches, and the *most* simple stem has few—which seems strange.

An entire leaf. *Integrum folium.*—Undivided, without any sinus or opening in the edge. *Indivisum, sinu omni destitutum.*

An entire perianth. *Integrum perianthium.* Opposed to *fissum*, cloven. As in *Genipa*.

Sometimes the superlative degree is used, and must be rendered—*quite, very* or *absolutely* entire.—*Integerrimum folium: ipso margine lineari, nec minimum secto.* With a linear edge, not in the least cut or divided. As in *Rhamnus Frangula, Trientalis europæa*.—It is applied also to the *Stipula*.

EPIDERMIS.

EPIDERMIS. The outer dry and very thin coat or covering of a plant; corresponding with the scarf skin.—*Tunica exterior plantæ sicca tenuissima.*

EQUAL. A calyx or corolla is said to be equal (*æqualis*), when the parts are of the same size and figure. In *Utricularia*, the calyx is equal; in *Primula*, *Limosella*, &c. the corolla is equal. *Regular* expresses the idea better.

Equal Polygamy. See *Æqualis*.

Equinoctial flowers. Opening at a regular stated hour. See *Vigiliæ*.

EQUITANTIA folia. Equitant leaves; riding as it were over each other. *Quum folii latera parallele connivent, ut interiora ab exterioribus includantur; quod non in conduplicatis obtinet.* Philos. Bot.—When the sides of a leaf converge in parallel lines, so that the inner leaves are inclosed by the outer ones: which is not the case in conduplicate leaves.—It is a term used

in foliation or leafing. In *Delin. Pl.* it is called *equitans vernatio*, and is thus explained—*marginibus conniventia folia situ opposito, ut alterum includat alterum*. When two opposite leaves converge so to each other with their edges, as that one incloses the other.—As in *Iris*, *Hemerocallis*, *Acorus*, *Carex*, *Gramina*.

ERECT or *Upright*. *Erectus*.—When applied to a stem or branch, it is not taken strictly, but is so called, when it approaches to a perpendicular with the ground—*fere ad perpendiculum se attollens*. When a stem or branch is entirely perpendicular without any bending, the word *strictus* is used.—In *Philos. Botan.* *Erectus* is opposed to *volubilis*; and must therefore be understood to mean a stem standing of itself without support, in opposition to *twining*.

A leaf is said to be *erect*, when it makes so very acute an angle with the stem as to be close to it—*quod ad angulum acutissimum cauli adsidet*.—When it
makes

makes an acute angle with the stem, it is said to be *patens*, spreading.

An *erect flower* has its aperture directed upwards: as in *Trillium sessile*. Opposed to *nutans*, nodding.

An *erect anther*, fixed by one end to the top of the filament; contrasted with *versatilis* and *incumbens*, which are fixed by the side.

This term is applied also to the *petiole*, *peduncle*, and *stipule*.

The dimin. *erectiuscula* is sometimes used for *somewhat* or *nearly upright*; and is applied to the capsule of *Hellebore*. The distinction seems hardly necessary, since the term erect or upright is taken so loosely.

EROSUM folium. An Erosc or gnawed leaf.

When a sinuate leaf has other very small obtuse sinuses on its edge.—*Cum folium sinuatum margine sinus alios minimos obtusos acquirit.*—It has the appearance of being gnawed or eaten by insects.

ESSENTIAL *Character* of Vegetables. *Character Essentialis*. A single or peculiar natural mark, distinguishing one genus from all others in the same natural order. Innumerable instances of such occur in Linneus's *Systema Vegetabilium*.

Even. See *Lævis*.

EVERGREEN. *Sempervirens*. Flourishing through all seasons of the year.

EXARATUS. Scored.

EXASPERATUS. Roughened.

EXPANSUS. Expanded, spread out: as the calyx in *Helianthus*.—*Patens*, and the dimin. *Patulus*, are better expressed by *Spreading*—which see.

EXPLANATUS. Unfolded, or spread out flat: as the lip of the corolla in *Antirrhinum canadense*.

EXSERTA (from *exsĕro*, to put forth) *stamina*; *exsertæ antheræ*. Protruded stamens

mens or anthers. Standing out of the corolla, or appearing above it; as in some species of *Erica*. Opposed to *inclusa*, shut in, or inclosed within the corolla.

EXSTIPULATUS. Without stipules. As in many sorts of *Cistus*, *Cardamine parviflora*, &c.

EXSUCCUS. Juicelss, without juice; opposed to succulent. It respects the substance of leaves.

EXTRAFOLIACEÆ *stipulæ*. Extrafoliaceous stipules. Growing on the outside of the leaves, or below them.—*Infra folium collocatæ*. As in *Betula*, *Tilia*, and the class *Diadelphia*. Opposed to *intrafoliaceæ*.—It is applied also to *peduncles*, and *prickles*.

EYE of a seed. *Hilum*—which see.

F

FACTITIOUS or *Artificial* Character.—

Character factitius. A mark or marks distinguishing one genus from another in an artificial arrangement: which is done by Ray and others in synoptical tables.

FAMILIES of Vegetables. Linneus (Philos.

Bot.) divides the vegetable world into seven families. 1. Fungi. 2. Algæ. 3. Musci, or Mosses. 4. Filices, or Ferns. 5. Gramina, or Grasses. 6. Palmæ, or Palms. 7. Plantæ, or plants; including all that are not in the foregoing families. See *Gentes*.

M. Adanson published a system, under the title of *Familles des Plantes*. And the Lichfield Society have given their translation of Linneus's *Genera Plantarum* the same title, in English.

F A

FARCTUS (*farcio*, to stuff or cram). Stuffed, crammed, or full; without any vacuities.
 —*Farctum folium*; a stuffed leaf, full of pith or pulp; in opposition to *tubulosum* and *fistulosum*, tubular or hollow like a pipe.—It is applied also to the *stem* and *pericarp*.

Farina. See *Pollen*.

FASCICLE (*fasciculus*, dimin. from *fascis*), a bundle. A species of inflorescence, or manner of flowering, in which several upright, parallel, fastigate, approximating flowers are collected together: as in *Dianthus barbatus*.—*Colligit flores erectos, parallelos, fastigiatos, approximatos*. Hence

Fasciculāris radix: a fascicular or fascicled root. A species of the tuberous, with the knobs collected in bundles, as in *Pæonia*.

Fasciculāta folia: fascicled leaves. Growing in bundles or bunches from the same point, as in *Larix*.

FASTI-

FASTIGIATUS (*fastigium*, the pointed top, or roof of a building).—*Caulis: ramis æqualis altitudinis.* A fastigiate stem, having branches of an equal height.—*Fastigiati pedunculi: cum ita attollunt fructificationes in fasciculum, ut superne æquales altitudines evadant, ac si horizontaliter detonsi essent.* Peduncles are fastigiate, when they elevate the fructifications in a bunch, so that they are all of an equal height, as if they had been shorn off horizontally—or, when they are so proportioned as to form an even surface at top, like a flat roof: as in *Dianthus* and *Silene*.—*Umbella fastigiata: gradatim assurgens.* Delin. Pl. A fastigiate umbel, rising gradually. This is a different idea from the former: and in *Philos. Botan.* the umbellate flower is thus described—*est aggregatus ex flosculis pluribus insidentibus receptaculo in pedunculos fastigiatos, omnes ex eodem puncto productos.*—Here we are probably to understand *fastigiatos* in the former sense of *level-topped*: but I am at a loss to conceive how Linneus came

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came to annex this idea to *fastigium* and its derivatives; since roofs are not flat in northern countries; and although they be so in the east, and in some parts of Italy, yet *fastigiatus* seems applied to lofty and pointed buildings. Thus Solinus says of the pyramids—*turres sunt in Ægypto fastigiatæ, ultra celsitudinem omnem, quæ fieri manu possit.*

FAVOSUM *receptaculum.* A honey-combed receptacle. See *Alveolate.*

FAUX. The jaws, chaps, throat, or opening of the tube of the corolla—or, between the segments of the corolla, where the tube ends.—As in the class *Didynamia* and the *Asperifoliæ* in class *Pentandria.*—*Hiatus inter lacinias corollæ ubi tubus terminatur.*—The whole upper part of the tube is called the neck, *collum*: and the opening is sometimes termed the mouth, *os.*

Feather. See *Pappus.*

FEATHERED.

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FEATHERED. *Plumofus*. See *Down* and *Plumofus*.

Some put feathered for pinnate, but improperly.

FEMALE plant. *Femina planta*. Which has female flowers only. *Quæ floribus tantum femineis*. *Female flower*. *Femineus flos*. Which has pistils or stigmas, without stamens, or at least anthers.

Fence, put by Dr. Withering for the *Involucre*.

FERNS. See *Filices*.

FERRUGINOUS colour. *Color ferrugineus*.
The colour of rusty iron.

FERTILE flowers, producing seed.

FIBRE. *Fibra*—of a root. A thread or longitudinal canal, imbibing moisture from the earth. *Canalis longitudinalis humidum terræ sugens*.—These fibres properly constitute the roots of vegetables;
the

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the main body, whence they usually proceed, is the descending trunk; and will, in many plants become a trunk, if the plant be turned upside down.

A branch or subdivision of a fibre is called a fibril. *Fibrilla*.

A root consisting wholly of fibres, as in many Grasses, is termed a fibrous root. *Radix fibrosa*.

Fiddle-shaped. See *Panduræforme*.

FILAMENT. *Filamentum* (*Filum*, a thread).

The thread-like part of the stamen, supporting the anther, and connecting it with the flower. *Pars elevans adnectensque antheram*.

Filaments, in the same flower, are—

1. Equal, or all of the same length.
2. Unequal, or of different lengths.
3. Connate, or united.
4. Alternate.

Most filaments are simple; some few are bifid; and others Tricuspidate, or broad and trifid at the end.

FILICES.

FILICES. *Ferns.* The fourth family; and the sixth great tribe or nation, in Linneus's General Distribution of Vegetables. The first order of the class *Cryptogamia* in his Artificial System. The sixty fourth order in his Fragments of a Natural Method: and the fifty-fifth of his Natural Orders, at the end of *Gen. Pl.*

FILIFORM (*filiformis*). Thread-shaped. Of equal thickness from top to bottom, like a thread. Applied to peduncle, filament, style, and receptacle.—It seems to me more elegant to use filament and filiform, than to translate them by thread, and thread-shaped.

FIMBRIATUS. Fringed. *Fere idem ac decurrens in caule, & ciliatus in flore.* Giseke.—Almost the same with decurrent in the stem, and ciliate in the flower.—It appears to me, that it has no relation to the first, and that it is sufficiently distinct from the second.—I do not find this term either in *Philosophia Botanica* or *Delineatio Plantæ*. See *Fringed*.

Fingerea

Fingered leaf. See *Digitate*.

FISSUM folium. *Divisum sinibus linearibus, marginibusque rectis.*—Hinc *bifidum, trifidum, quadrifidum, quinquefidum, &c. multifidum*, a numero finuum.—*Indiviso* opponitur. See *Cleft*.

FISTULOSUS (*fistula*, a pipe) *caulis*. A fistulous stem. Hollow like a pipe or reed. Opposed to *farctus*, stuffed or full.—*Fistulosum folium*, a fistulous leaf; as in *Oenanthe fistulosa*.—*Fistulosum nectarium*, a fistulous nectary; as in *Aconitum*.

FIVE-CLEFT. *Quinquefidus*. See *Cleft*.

FIVE-FOLD leaves. *Quina folia*. In fives; growing by fives; or five and five together.

FIVE-LOBED leaf. *Quinquelobatum folium*. See *Lobatum*.

FIVE-PARTED leaf. *Quinquepartitum folium*.—Five-parted Corolla. *Corolla quinquepartita*. See *Partitum*.

FIVE-TOOTHED. *Quinquedentatus*. Applied to *petal* and *Capsule*. See *Dentatum*.

FIVE-VALVED *Quinquevalvis*. Applied to the *capsule*. See *Valva*.

FLACCIDUS *caulis, pedunculus*. A flaccid stem or peduncle. So feeble as not to support its own weight. Linneus uses it in the same sense with *laxus*, and in opposition to *strictus*.—The flaccid stem is exemplified in *Galium Mollugo*.

FLAGELLUM. A Runner. *Caulis longiores decumbentes, internodiis tantum remotis aut apice gemmantes*. Giseke. See *Runner*. Hence a sort of Cactus has the name of *flagelliformis*, because it resembles the lash of a whip (*flagellum*).

FLAT leaf. *Folium planum*. Having an even surface; in opposition to channelled, grooved, &c.—When applied to succulent leaves, it has both surfaces parallel, neither

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neither convex nor concave, in opposition to gibbous.

FLATTED. *Compressus*. Better expressed by *Compressed*—which see.

FLESHY leaf. *Folium carnōsum*. Full of pulp within: as in *Sedum* and other succulent plants. The substance more stiff than in the pulpy leaf: *folium pulposum*.—Applied to the capsule in *Mesembryanthemum*—and to the root, in *Valerian*, &c.

FLEXIBLE. *Flexilis*. Easily bent. Applied to the stem and raceme.

FLEXUOSE (*Zigzag*, With.) *Flexuōsus*. Changing its direction in a curve—from joint to joint or from bud to bud in the stem, as in *Ptelea*, *Smilax*, *Solidago flexicaulis*—from flower to flower in the peduncle, as in *Aira flexuosa* and some other Grasses. *Secundum articulos, vel a gemma ad gemmam, s. a flore ad florem horsum versus flexus*.

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FLOATING leaf. *Folium natans*. Lying flat on the surface of the water.

FLORAL bud. *Gemma florālis*. Containing the flowers. In opposition to *foliaris*, containing the leaves. See *Bud.*—Floral leaf. *Folium florale*. Immediately attending the flower, but different from the Bracte, which see.

FLORESCENTIA. Florescence, or the flowering season. The time when vegetables usually expand their flowers.

FLORET. *Floſcūlus*. The partial or separate little flower of an aggregate flower: chiefly in the class *Syngeneſia*, or compound flowers properly ſo called; but applied alſo to the umbel, cyme, &c.—I prefer *floret* to *floſcule*, becauſe it is a regular diminutive of *flower*.

Flos. See *Flower*.

FLOSCULOSUS flos. A floſcular flower. A term of Tournefort's, for which Linneus ſubſtitutes

substitutes *tubulosus*. It is opposed to *semi flosculosus*—*ligulatus* of Linneus. See *Tubulosus*.

FLOSCULUS, *est flos partialis floris aggregati, compositi, umbellati, cymosi*. See *Floret*.

FLOWER. The organs of generation in vegetables, with their coverings.—A flower, when complete, consists of a calyx, corolla, stamen, and pistil; but the essential parts are the anther and stigma, which are sufficient to constitute a flower, either together in hermaphrodite flowers, or separate in male and female flowers.

Flower-stalk. See *Pedunculus*.

FOLIACEA *spica*. A leafy spike. Having leaves intermixed with the flowers.—*Glandulæ foliaceæ*. Leafy glands, or glands situated on the leaves. See *Gland*.

FOLIARIS *cirrus*. A tendril placed on the leaf.—*Foliaris gemma*. A leaf bud. Containing leaves, not flowers.

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FOLIATIO f. *Vernatio*. Foliation, vernation or leafing. The disposition of the nascent leaves within the bud.—The different modes of foliation are by—1. *Involution*. 2. *Revolution*. 3. *Obvolution*. 4. *Convolution*. 5. *Imbrication*. 6. *Equitation*. 7. *Conduplication*. 8. *Plaiting*. 9. *Reclination*. 10. A *Circinal* or spiral direction. See these terms explained in their proper places,

FOLIATUS *caulis*. A leafy stalk. In opposition to *Aphyllus*, leafless.

FOLIOLUM (dimin. of *folium*). *Partiale est folii compositi*. See *Leaflet*.

FOLIOSUM *capitulum*. A leafy head. Having leaves intermixed with the flowers.

FOLIUM (from *φυλλον*). *Organum motus plantæ*. Delin. Pl.—*Folia transpirant & adtrahunt (uti Pulmones in Animalibus), umbramque præbent—in se tamen re ipsa musculi analogæ sunt, licet non uti in animalibus caudâ affixa, cum motus voluntarius*
in

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in his dari nequeat. Philof. Botan.—*Folium expandens par aëra superficiem, volatile, sæpe petiolatum.* Regn. Veg. See *Leaf*.

FOLLICULUS (dimin. from *follis*, a bag) a follicle. A univalvular pericarp, opening on one side longitudinally, and having the seeds loose in it. *Pericarpium univalve latere altero longitudinaliter dehiscens, nec futuræ semina affigens.* Exemplified in *Asclepias*, *Apocynum*, *Stapelia*. See *Conceptacle*.

In Philof. Botan. Follicles (*folliculi*) are vessels distended with air: (*air bags*, *With*,) as at the root in *Utricularia*, and on the leaves in *Aldrovanda*.

FOOT. *Pes.* A measure from the bend of the elbow to the base of the thumb.

Footstalk, has been put by English writers both for the *peduncle* and *petiole*. See *Pedunculus* and *Petiolus*.

FORK. *Furca.* A divided prickle. *Aculeus*

F O

in plures divisus. Called *bifid* or *trifid* from the number of divisions. Exemplified in *Berberis*, *Ribes*, *Gleditsia*, &c.

Forked, *furcatus* : branched or subdivided, usually into two.—Applied to anthers—to bristles; as in *Leontodon hispidum*, *Arabis thaliana*—to fronds, as in *Jungermannia furcata*—and to stems; but dichotomous is more proper, at least when they divide more than once.

FORNICATUS (*fornix*, an arch or vault).
Arched or vaulted: which see.

FOVILLA. A fine substance, imperceptible to the naked eye, exploded by the pollen in the anthers of flowers.

FOUR-CLEFT leaf. *Folium quadrifidum*.—
See *Cleft*.

FOUR-CORNERED stem or peduncle. *Tetragonus caulis*—*pedunculus*. As in Verticillate plants.—*Siliqua tetragona*, a four-cornered silique, as in *Sinapis nigra*.

FOUR-

FOUR-FOLD leaves. *Folia quaterna*. Four together, or by fours, at each joint or whorl; as in *Sberardia fruticosa*, *Asperula taurina*, *cynanchica*, &c. several of the *Galiums*, *Erica herbacea*, &c.

FOUR-LEAVED tendril. *Cirrus tetraphyllus*. Four leaves to each tendril; as in *Lathyrus sativus*.

FOUR-LOBED leaf. *Folium quadrilobatum*,
See *Lobatum*.

FOUR-PARTED leaf. *Folium quadripartitum*.
See *Parted*.

FRINGED corolla.—*Fimbriata*. The edge furrounded by hairs or bristles not parallel or so regularly disposed as in the *ciliate* corolla. Exemplified in *Menyanthes trifoliata*.

FROND. *Frons*: anciently written *fruns* (from *Βεῦω pullulo*, to germinate or bud); and signifying a twig of a tree with its leaves. Linneus applies this term to the peculiar leafing of Palms and Ferns. He defines

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defines it to be a kind of trunk or stem, which has the branch united with the leaf, and frequently with the fructification.—*Frons, folium e stipite factum.*—*Stipes, truncus a folio non distinctus.* Regn. Veg.

FRONDESCENTIA. Leafing season. *Tempus æstatis, quo species singulæ plantarum prima folia explicant.* The time of the year when plants first unfold their leaves.

FRONDOSUS caudex. A frondose stem; applied to Palms.—*Frondosus prolifer flos;* a leafy proliferous flower. It sometimes happens in the *Rose, Anemone, &c.*

FRUCTESCENTIA *comprehendit tempus, quo semina matura dispergunt Plantæ.* Fructescence, or the fruiting season, is the time when vegetables scatter their ripe seeds.

FRUCTIFICATIO: *vegetabilium pars temporaria, generationi dicata, antiquum terminans, novum incipiens.* Fructification, or fruiting,

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fruiting, is a temporary part of vegetables, appropriated to generation, terminating the old and beginning the new vegetable.

—The essence of it consists in the flower and fruit; and there is no fructification without *anther*, *stigma*, and *seed*.—When perfect it consists of seven parts——

1. Calyx. 2. Corolla. 3. Stamen.
4. Pistil. 5. Pericarp. 6. Seed. 7. Receptacle.—Of these the four first belong to the flower; the two next to the fruit; and the last is common to both.

FRUCTUS. Semen cum pericarpio.

FRUIT: *fructus*. The seed with its pericarp.

It is a fruit, however, whether there be a pericarp or not.

Fruit-stalk. See *Pedunculus*.

FRUSTRANEA (*frustra*, in vain) *polygamia*.

The name of the third order in the class *Syngenesia* of Linneus's Artificial System; comprehending such of the Compound flowers as have perfect florets in the disk,
producing

producing seed ; but imperfect florets in the ray, which for want of a stigma are barren.—*Cum flores disci hermaphroditi stigmate instruuntur & semina proferunt; flosculi vero radium constituentes, quum stigmate careant, semina proferre nequeunt.*

FRUTESCENS *caulis.* A frutescent stem. From herbaceous becoming shrubby. As in *Chironia baccifera* and *frutescens*.

FRUTEX. A shrub. *Caulis adscendens supra terram absque gemmis—sed intra Fruticem & Arborem nullos limites posuit natura, sed opinio vulgi.* See *Shrub*.

FRUTICOSUS *caulis.* A shrubby stem. *Perennis cum caudicibus pluribus.* See *Shrubby*.

FUGAX. Fugacious, fleeting, of short continuance, soon falling off: as the corolla of some flowers.

FULCRUM (from *fultum*, which is from *fulcio*), Fulcre, prop, or support. A help
to

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to vegetables for their commodious sustentation.—*Fulera adminicula plantæ sunt, pro commodiore sustentatione.*

Fulcres are of seven kinds.—1. *Stipula* or Stipule. 2. *Bractea* or Bracte. 3. *Spina* or Thorn. 4. *Aculeus* or Prickle. 5. *Cirrus*, Clasper or Tendril. 6. *Glandula*, a Gland. 7. *Pilus*, Hairs or pubescence.

In Delin. Pl. these are otherwise enumerated. 1. *Petiolus*, the petiole, leaf-stalk or foot-stalk. 2. *Stipula*. 3. *Cirrus*. 4. *Pubes*. 5. *Arma*, Arms or instruments of defence; comprehending Prickles, Thorns and Stings. 6. *Bractea*. 7. *Pedunculus*, the peduncle, flower-stalk and fruit-stalk.—These terms are explained in their several places.

Fulcratus caulis—ramus. A stem or branch fulcrated, or furnished with fulcres.

Botanists frequently use the Latin word, with the Latin plural—*fulcra*—in English, which I cannot approve.

FULL flower. *Flos plenus.* When the corolla

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rolla is so multiplied as to exclude all the stamens. Polypetalous flowers are generally the object of plenitude. See *Luxurians*.

FUNGI, Funguses or Mushrooms. The first of the great Families; and the ninth of the Nations, Tribes, or Casts, into which Linneus has distributed the whole Vegetable world. Also the sixty-seventh order in his Fragments of a Natural Method; the fifty-eighth of his Natural Orders; and the fourth order of the class *Cryptogamia*, in his Artificial System.

FUNNEL-SHAPED corolla. *Infundibuliformis corolla*. Monopetalous and conical, with a tubular basis: as in *Lithospermum*, *Cynoglossum*, *Pulmonaria*.

FURCA. See *Fork*.

FURROWED, fluted, or grooved Stem. *Caulis sulcatus*. Marked with deep broad channels longitudinally.—Applied sometimes to the leaf.

FUSI-

FUSIFORMIS (*fusus*, a spindle) *radix*. Fusi-
form or Spindle-shaped root. Simple or
generally so, tapering downwards to a
point; as in *Radish*, *Carrot*, *Parsnep*.
Applied also to the leaf, as in *Crassula*
rubens.

G

GALEA (an helmet). The upper lip of
a ringent corolla. Linneus uses the words
labium superius or upper lip.

GAPE. *Rictus*. The opening between the
two lips, in an irregular corolla.

GAPING corolla. *Hians*. In opposition to
closed, *clausa*.

GASHED leaf. *Folium incisum* f. *dissectum*.
Having the sections or divisions usually
determinate in their number; or at least
more so than in the *Laciniate* leaf.—

The

G E

The *Gashed* differs from the Cleft leaf (*fissum*,) in having the sections extending but little beyond the edge (though deeper than in the crenate leaf); whereas in the cleft leaf they reach almost to the middle. See *Dissectum* and *Laciniatus*.

Hence Linneus has formed several compound terms, which see under *Incisum*.

GEMINA folia. *Eodem petiolo duo folia annectente*.—*Geminæ stipulæ*. *Duæ & duæ per paria*.—*Geminatus pedunculus*. *Ex eodem puncto bini*. See *Double*.

GEMMA. A Gem or Bud. *Hybernaculum plantæ e rudimentis foliorum præteritorum*. See *Bud*.

GEMMATIO. Gemmation or Budding. *Gemmæ constructio*—*ex foliis, stipulis, petiolis aut squamis*.—The construction of the Bud; of leaves, stipules, petioles or scales.

GEMMIPARUS. Gemmiparous. Producing gems or buds.

GENERAL

G E

GENERAL FENCE. The same with Universal Involucre. See *Involucrum*.

GENERIC Character. The definition of the Genus. This is factitious; essential or natural. See *Genus* and *Character*.

Generic Name. *Cognomen gentilitium*. The family surname, as it were, of vegetables.

GENICULATUS. Kneed. (Knee-jointed; *With*.) Applied to a stem, peduncle or awn, forming a very obtuse angle at the joints, as when the knee is a little bent. As in *Alopecurus geniculatus*.—In *Declin. Pl.* it is explained to be—*internodiis interceptus*, which is the same with *nodosus*. In my opinion this is the difference—that *nodosus* means knotty, or merely having knots; whereas *geniculatus* implies, that the stem is bent in an angle at the joint. *Flexuosus* is totally different from this, for it implies deviation in a curve, not at an angle. See *Knotted*.

GENICULUM (dimin. from *Genu*). Knee,
N
knot,

knot, or joint. Properly a joint, where there is a bending like that at the knee; but frequently put for a joint in general; and then synonymous with *nodus*. See *Knot* and *Knotted*.

GENTES. Nations, great Tribes, or rather Casts of Vegetables. Linneus makes nine of them—1. *Palmæ*. 2. *Gramina* or Grasses. 3. *Lilia*. 4. *Herbæ*. 5. *Arbores*, Trees. 6. *Filices*, Ferns. 7. *Musci*, Mosses. 8. *Algæ*. 9. *Fungi*.—The only difference between this arrangement and that of *Families* is, that the third, fourth, and fifth divisions of this are included in the seventh of that.

GENUS. The third subdivision in a systematical arrangement of vegetables; containing plants of the same class and order, which agree in their parts of fructification.—*Genera tot dicimus, quot similes constructæ fructificationes proferunt diversæ species naturales*. Philos. Bot.—*Genera tot sunt, quot attributa communia proxima distinctarum specierum, secundum quæ in primordio creata fuere*. Gen. Pl. in Præf.

Genuses

G E

Genuses making an awkward plural, and *genera* not being English; I have often wished that we might be allowed to substitute *kind* for *genus*, and *sort* for *species*.

GERMEN. Germ, Ovary or Seed-bud.
Rudimentum fructus immaturi in flore.
 The rudiment of the fruit yet in embryo.
 —Analogous to the *Ovarium*, since it contains the rudiments of the seeds.—It is the lower part or base of the pistil, which see. *Germ*, differing little from the Latin term, and being sufficiently established as an English word, may be used in preference to *Germen*: such, however, as adopt the latter, will, I hope, when they write in English, use *Germens* in the plural, and not *Germina*.

A Germ, when it is included within the corolla, is said to be *Superior*; but when placed below the corolla, *Inferior*.
 —On the contrary, when a corolla is placed above the germ, it is called *Superior* (*corolla supera, flos superus*); and when it incloses the germ, so as to have

its base below it, then it is called *Inferior* (*corolla infera, flos inferus*).—When a germ is elevated on a fulcre, besides the peduncle, it is said to be *Pedicelled*, *pedicellatum*.

GERMINATIO *est tempus, quo semina terræ mandata eadem excludunt in cotyledonum proventum.* The time in which seeds vegetate.

GIBBOUS leaf. *Folium gibbum.* (Dr. Withering uses *hunched*). Having both surfaces convex, by means of a very abundant pulp.—*Quod utramque superficiem facit convexam, mediante copiosiore pulpa.* See *Convex*.—This term, when applied to a perianth, means only swelling out at bottom. Instances of this we have in the classes *Diadelphia* and *Tetradynamia*.

Gills. See *Lamella*.

GLABER *caulis.* *Glabrum folium.* A smooth stem or leaf. *Superficie lævi, absque omni inæqualitate.* Philof. Botan. where it is opposed to *tomentosum*. In Delin. Pl. it is explained

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explained to be—*superficie lubrica*. See *Smooth*.

GLADIATA *filiqua*. *Gladiatum legumen*.
A gladiate or sword-shaped filique or legume. As in *Cleome arabica*, *Dolichos ensiformis*.

GLANDULA. A Gland or Glandule. *Papilla humorem excernens*. Or, as it is explained in Regn. Veg.—*fulcrum secernens liquorem*. An excretory or secretory duct or vessel. Exemplified in *Urena*, *Ricinus*, *Iatropa*, *Passiflora*, *Cassia*, *Oculus*, *Turnera*, *Salix tetrandra*, *Heliocarpus*, *Bryonia zeylanica*, *Acacia cornigera*, *Bauhinia aculeata*, *Prunus armeniaca*, *Amygdalus*, *Morisona*.

Glands are usually found on the leaves—the petioles—the peduncles—or the stipules.

Glandulatio. *Vasa secretoria offert*. The situation and structure of glands.

Glandulosum folium. Quod glandulas insidentes gerit, vel in dorso, vel in serraturis.

turis. A glandular leaf is that which has glands either on the surface or on the ferratures.

Glass-shaped. See *Cyathiformis*.

GLOBOSUS. Globose, Globular, Spherical
—radix: *subrotunda radiculis lateralibus*,
root—roundish, with lateral fibres; as in
Bunium, *Ranunculus*.—Globosum capitulum: *undique rotundum*. A globular head of flowers, round on all sides.—Globosa corolla; a corolla or flower round like a ball; as in *Trollius*.—Applied also to the Receptacle—to the Germ—and to Seeds,

Globofo-depressum pericarpium. A flattened-globular, or more properly an oblate spheroidal pericarp or fruit.

GLOCHIS (γλωχίς, cusps, a point). Glochides: *mucrones apice retrorsum multidentati, nec curvati*.—In Philos. Botan. we have *hami triglochides*, as in *Lappula*; but the *hamus* or hook has a curved point—the *glochis* a straight one. See *Barb*.

GLO-

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GLOMERATA (*glomero*, from *glomus* a clue of yarn or thread) spica—panicula. A glomerate spike—*spiculis varie congestis*; having the spikelets or component spikes variously heaped together: as in *Panicum italicum*.—The glomerate panicle is exemplified in *Poa ciliaris*, and *Dactylis glomerata*.—The flowers grow pretty close together, in a globular or sub-globular form.—Scaliger derives *Glomus* from *Globus*; but others on the contrary derive *Globus* from *Glomus*.

GLOMERULUS (dimin. from *Glomus*). A Glomerule, or small glome.

GLOMUS, a Glome, or roundish head of flowers.

GLUMA. Glume (from *glubo*, *denudo*, corticem detraho, to bark, or take the bark from a tree; from the Greek γλῦφω, to scrape or carve). *Calyx graminis, valvis amplexantibus*. The calyx or corolla of corn and grasses, formed of valves embracing the seed.—It is thus explained by Varro (de R. R. l. c. 48): “Spica—

“ inordeo & tritico tria habet continentia,
 “ *granum, glumam, arislam*.—Gluma est
 “ folliculus ejus.—Arista & granum om-
 “ nibus fere notum: gluma paucis.—
 “ Videtur vocabulum etymon habere a
 “ glubendo, quòd eo folliculo deglubitur
 “ granum.” In common language it is
 called the husk or chaff.

Uniflora, *bi-* & *multiflora*. Having one,
 two or many flowers. *Univalvis bi-* &
multivalvis. Having one, two or many
 valves. *Colorata*, coloured; of any co-
 lour but green, the usual one. *Glabra*,
 smooth. *Hispida*. Hispid, shaggy, or
 rough with hairs.

GLUMOSUS flos; *habet receptaculum fili-*
forme, cujus basis instruitur gluma com-
muni.—A glumose flower is a kind of
 aggregate flower, having a filiform re-
 ceptacle, with a common glume at the
 base. As in corn and grasses, *Scirpus*,
Cyperus, *Carex*.

GLUTINOSITAS (*gluten, glue*). Glutinosity
 or

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or glucinefs. *Qualitas humoris lubrici.*
The quality of slippery moisture.

GLUTINOSUM folium. A glutinous leaf.
Humore lubrico illitum. Besmeared with
slippery moisture.

Gnawed. See Erosed.

GRAMINA. Grasses. The fifth family, and
the second nation, tribe or cast in Lin-
neus's General Division of the Vegetable
Kingdom. The fourteenth order in the
Fragments of a Natural Method in Philos.
Botan.—and the fourth of the Natural
Orders at the end of Gen. Pl.—In the
Artificial System, most of the grasses are
contained in the second order of the fifth
class.

GRANULATA radix. A granulate root.
(Beaded, *With.*)—*Particulis carnosis ad-*
spersa. Consisting of several little tubers
or fleshy knobs, resembling grains of
corn: as in *Saxifraga granulata.*

Grooved. See Furrowed.

GYM-

GYMNOSPERMA *planta* (*γυμνος* *naked*, and *σπέρμα* *seed*). A plant bearing naked seeds; in opposition to that which has the seeds inclosed in a capsule or other vessel.

GYMNOSPERMIA. The name of the first order in the class *Didynamia*, in Linneus's Artificial Arrangement; comprehending those plants which have four stamens, of which the two middle ones are shorter than the two outer ones, within a ringent flower, succeeded by four naked seeds.—These are the same with the *Labiati* of Tournefort; and the *Verticillatæ* of Ray, and Linneus in his Natural Orders.—See *Didynamia* and *Angiospermia*.

GYNANDRIA (*γυνή* *a woman*, and *ανηρ* *a man*). The name of the twentieth class in the Linnean Artificial System, containing all plants with hermaphrodite flowers, which have the stamens growing upon the style; or else having an elongate receptacle bearing both stamens and styles. This class has been considerably reduced by some modern reformers, and the plants referred

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referred to other classes. Others have entirely dismissed it from the sexual system. The reduction appears reasonable; but the singularity of the order *Diandria* surely may demand a separate class for itself.

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HABITATIO plantarum. *Locus ubi sponte prognascuntur.* The native place of growth of plants. Called by some, barbarously and vulgarly, their *habitat*.

HABITUS plantæ. Commonly called the *habit* of plants; but more properly their *air, port*, or general external appearance. Linneus defines it to be, a certain conformity which kindred or congenerous vegetables have in their placentation, rooting, branching, intortion, budding, leafing, stipulation, pubescence, glandulation, lactescence, floescence, &c.

Hence

Hence such characters are called *Characteres habituales*. And these, though not sufficient of themselves to distinguish vegetables, yet frequently make them known at first sight. Many of the natural classes are directly apparent from this general similitude—as the *Caryophylleæ*, *Verticillatæ*, *Asperifoliæ*, *Umbellatæ*, *Leguminosæ*, *Siliquosæ*, *Columniferæ*, *Filices*. In forming the characters of the genus, these have been neglected, since the fructification has been thought amply sufficient for the purpose.

HAIR. *Pilus*. A species of pubescence, or excretory ducts on the surface of plants; long, straight and distinct.

HAIR-LIKE Filament. *Capillare*.

HAIRY leaf. *Folium Pilosum*. Covered with hairs—applied also to the style, and to seeds. *Hairy receptacle*. Having hairs between the florets.

Halbert-shaped. See *Hastate*.

HALVED head. *Dimidiatum capitulum*. Hemispherical,

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mispherical, or resembling half a head : round on one side and flat on the other.

—A halved spathe. *Dimidiata spatha*. Investing the fructification on one side only.—A halved involucre. *Dimidiatum involucreum*. Placed wholly on one side : as in *Æthusa*.

HAMUS. A hook. *Mucro acuminatus curvatus*. Hamus feminis : quo adhæret animalibus. See *Hook* and *Pubescence*.

HAMOSUS. Hooked. *Hamosa seta*. A bristle curved at the end.

HAND. A measure taken from the breadth of the hand : or three inches. See *Measures*.

Handed or *hand-shaped* root—leaf. See *Palmata*.

HANGING leaf. *Folium dependens*. Pointing directly to the ground.

HASTATE leaf. *Folium hastatum*. Resembling the head of a halbert. Triangular, hollowed at the base, and on the sides, with the angles spreading.—*Triangulare*,

angulare, basi lateribusque excavatis, angulis patulis. Philof. Bot.—In Delin. Pl. it is thus explained. *Sagittatum, angulis posticis sinu divisis ad latera prominentibus.*—Exemplified in *Rumex* and *Scutellaria hastifolia*.

Hatchet-form. See *Dolabrisforme*.

HEAD. *Capitulum.* A species of inflorescence, or a manner of flowering, in which several flowers form a kind of ball. As in *Gomphrena*. This is globular—roundish—or halved. Leafy—or naked.

Flowers in this case are said to grow in a head. *Capitati flores.*—A stigma round like a ball, is called *Capitatum stigma*; headed or head-shaped.

HEAPED panicle. *Congesta panicula.* Abundant in flowers, but not so close as in *densa panicula*.

HEART of a seed. *Corculum.* The rudiment of the future plant. It consists of the Plume (*Plumula*) and Rostel (*Rostellum*.) See *Corculum*.

HEART-

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HEART-SHAPED Leaf. *Folium cordatum*.

Somewhat ovate, hollowed at the base, without posterior angles.—It may be called either *cordate* or *heart-shaped*; but I dislike *hearted*.

HEART-TONGUED Frond. *Cordato-lingulatus frons*. Tongue-shaped, and hollowed at the base. As in *Asplenium Scolopendrium*.

HEDGE-HOGGED Pericarp. *Echinatum pericarpium*. Beset with prickles. A round prickly set of flowers, like a hedge-hog, is called *Echinus* : a Burr.

HEDGE-HOG-HOOKED. *Echinato-uncinata spica*. A spike beset with prickles which are hooked at the end.

HELMET. *Galea*. The upper lip of a ringent corolla.

HELMET-TUBED Petal. *Galeato-tubulatum petalum*. Having the tube shaped like a helmet.

HEMISPHERICAL Calyx or Nectary. In
form

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form of half a sphere. The first exemplified in *Tanacetum*: the second in *Narcissus Jonquilla*.

HEPTANDRIA ($\epsilon\pi\tau\alpha$ *seven*, and $\alpha\upsilon\tau\eta\rho$ *a husband*). The seventh class in the system of Linneus, comprehending those plants which have seven stamens to the flowers.

HERB. *Herba*. In common language an *Herb* is used in opposition to a *Tree*. By Linneus *the herb* is put for that part of a vegetable, which arises from the root, is terminated by the fructification, and comprehends the stem, leaves, fulcres, and hybernacle.—*Vegetabilis pars, orta a radice, terminata fructificatione, comprehenditque truncum, folia, fulcra, hybernaculum*. Philos. Bot.—*Herba adscendens, aëria spirans, movens*. Regn. Veg.

Herbaceous plants, are such as perish annually down to the root.

Herbaceous stem, perishing annually, soft not woody.

Herbs constitute the fourth nation, great
tribe

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tribe or cast, into which Linneus divides all vegetables. See *Gentes*.

HERMAPHRODITE flower. *Hermaphrodītus flos*. Having both anther and stigma. An *Hermaphrodite plant* is that which has only hermaphrodite flowers.

HESPERIDEÆ. The name of the forty first order in Linneus's Fragments of a Natural Method; containing only three genera—Citrus, Styra, Garcinia.

HEXAGONUS caulis. A hexagonal stem. Having six angles.

HEXAGYNIA (εξ *six*, and γυν *a woman*). One of the orders in the ninth and thirteenth classes of the Linnean system; containing those plants which have six styles in the flowers.

HEXANDRIA (εξ, and ανη *a man or husband*). The name of the sixth class in Linneus's system; comprehending those plants which have hermaphrodite flowers with six equal stamens.—This is a natural class, nearly the same with the *Lilia*

or *Liliaceous plants* of other writers; and contains a great part of the sixth, ninth, tenth, and eleventh orders, in Linneus's Natural Arrangement, with the admixture of some others.

HEXAPETALA *corolla*. A corolla consisting of six distinct petals.

HEXAPETALOIDES *corolla*. Divided so near to the base as to have the appearance of a six-petalled corolla, but in reality one-petalled, as in *Agapanthus*.

HEXAPHYLLUS *calyx*. A calyx of six leaves or leaflets.

HILUM. The Eye—commonly so called in the bean. The external mark or scar of the umbilical chord on some seeds, where they adhere to the pericarp.—*Cicatrix umbilicalis*. Regn. Veg.—*Cicatrix externa seminis ab ejusdem affixione in fructu*. Philos. Bot.—As in *Cardiospermum*, *Staphylæa*, *Dolichos*, &c.

HIRSUTUS. Hirsute, rough with hair, shaggy.—Nearly the same with *hispid*, but

but having more hairs or bristles, and less stiff. Applied to the stem—frond—calyx, as in *Serratula alpini*—and legume, as in *Lathyrus odoratus*.

HIRTUS. Rough-haired. Nearly the same with *hirsutus*. The hairs stiffer than in *pilosus*.

HISPIDUS. Hispid. *Hispidus caulis*, a hispid stem. Beset with stiff bristles, as in *Brassica Erucastrum*.—*Hispidum folium*, a hispid leaf. Having brittle stiffish bristles scattered over the disk, as in *Turritis hirsuta*.

Since we cannot easily find significant English terms for all the numerous varieties of pubescence, it is perhaps best to use the Latin terms where we can. Thus here, *hirsute* and *hispid* are preferable to *shaggy* and *bristly*: but *hirtus* not being convertible to an English word, we must substitute *rough-haired*, or *rough with hairs*.

HOARY leaf. *Folium incanum*. Covered
O 2 with

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with a white pubescence: as in *Draba incana*, *Cistus incanus*.

HOLERACEÆ, *Holoraceæ*, commonly written *Oleraceæ* (from *Olus*, anciently *Holus*, a pot-herb). The name of the twelfth order in Linneus's Natural Orders; and the fifty-third in his Fragments of a Natural Method; containing *Spinach*, *Beet*, &c. &c.

HOLLOW stem. *Cavus truncus*, f. *culmus*.
As in corn, reeds, &c.

Hollow-tubular. *Tubulato-cavus*.

Honey-cup.—*Nectarium*. Honey-cup is improper, because few Nectaries are in form of a cup; not more so indeed than *glass ink-horn*, *silver terrene*, *Dresden China*, and many other barbarisms. But why multiply these unnecessarily? See *Nectarium*.

Hooded. See *Cowled*.

HOOFED or *Hoof-shaped*. *Ungulatus*. Exemplified in the filicle of the *Rose of Jericho*.

Hook.

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HOOK. *Hamus*. A crooked pointed process.

Hooked. *Hamofus*—A hooked bristle.

Hamofa seta. A sort of pubescence, in which the end of the bristle is curved.

See *Uncinatus*.

HORIZONTAL leaf. *Horizontāle folium*.

Making a right angle with the stem—having the upper surface turned towards the sky.—*Quod ad angulum rectum a caule discedit*. Philos. Bot. *Paginam superiorem cælo obvertens*. Delin. Pl. See *Adversum*.

—*Horizontalis flos*: a horizontal flower.

Parallel with the surface. *Æquori parallelus*.—

Radix horizontalis; a horizontal

root. Running immediately under the

surface, and parallel to it.

HORN or Spur. *Cornu* f. *Calcar*. The

hinder hollow part of the nectary in some

flowers, extended in a conical form: as

in *Orchis*, *Larkspur*, &c.—*Conica pro-*

ductio basæos. See *Spur*.

Horn-shaped. *Cornutus*.

Husk. See *Gluma*.

HYALINE. *Hyalinus*. (Ταλός, from υω pluo,

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the colour of rain water.) The colour of glass, with its transparency.

HYBERNACULUM. The Hybernacle.—*Herbæ compendium super radicem antequam excrescit.* Philos. Bot.—*Compendium herbæ totius, squamosum.* Regn. Veg.—A compendium of the whole herb, before it grows up. Or, in which the embryo of the future plant is inclosed by a scaly covering, and secured from external injuries during the winter.—It is either—a bulb (*bulbus*), formed from the remains of past leaves—or a bud (*gemma*), from the rudiments of future leaves.

HYBRIDA planta. A hybrid or hybridous plant, or mule. A monstrous vegetable produced from the mixture of two different species.

HYPOCRATERIFORMIS corolla. A salver-shaped corolla. Monopetalous, with the border spreading out horizontally or flat from the tube, like an old fashioned salver. As in some of the *Asperifoliæ*.—*Heliotropium, Myosotis*;—in *Diapensia, Aretia, Androsace, Hottonia, Phlox, Samolus*.

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JAG. *Lacinia*. A division or cleft in a leaf, calyx or corolla. This term relates chiefly to monophyllous calyxes and monopetalous corollas. These are named bifid, trifid, &c. according to the number of jags.

JAGGED. *Laciniatus*. Cleft or divided. A jagged leaf. *Folium laciniatum*. Divided irregularly, and the parts subdivided indeterminately.

JAWS. See *Faux*.

ICOSANDRIA (εικοσι *twenty*, and ανηρ *a husband*). The name of the twelfth class in the Linnean system; comprehending those plants which have hermaphrodite flowers with twenty or more stamens, growing on the inside of the calyx, not on the receptacle.—The situation, and not the number of the stamens is here to be attended to.—The calyx also is monophyllous and concave in this class; and

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the claws of the petals are fixed into the inside of the calyx. To confound this class with *Polyandria* is abominable.

IMBERBIS *corolla*. A beardless corolla. Applied to some sorts of Iris, in opposition to other sorts, which have a bearded corolla (*barbata*). This beard is the nectary.

IMBRICATE. *Imbricātus*. Lying over each other, like tiles on a roof. Applied to leaves and their ferratures, in the bud; or, a term in foliation—to the stem, when covered with scales: *tectus, ut nudus non appareat*—to the calyx, as in *Hieracium*, *Sonchus*, and other *Syngenesia*—to the spike, having flowers so close as to press over each other. Some use *tiled*; a term that can hardly pass.

IMMERSED leaf. *Submersum folium*. Growing under water. See *Demersum*.

IMPARI-PINNATUM *folium*. An unequally-pinnate leaf; terminated by an odd or single leaflet.

IMPERFECT

IMPERFECT flower. *Imperfectus flos*. De-
stitute either of the anther or stigma —
In Rivinus and some other authors it is
synonymous with *apetalus* of Tournefort,
stamineus of Ray, and *incompletus* of
Vaillant.

INÆQUALIS corolla. An unequal corolla.
Having the parts corresponding, not in
size, but proportion. As in *Butomus*.

INANIS truncus. A pithy stem. *Interne
medulla spongiosus*. Having a pith or
spongy substance within. When quite
empty, it is called *fistulosus*.

INCANUS. Hoary; which see.—Linneus
makes it synonymous with *tomentosus*.—
*Folia (incana) quæ colorem glaucum ha-
bent & fere argenteum, quod ex superficie
singulari oritur*. Philos. Bot. 219.

INCISUM f. *dissectum folium*. (Snipt, *With.*)
or Gashed; which see.

Inciso-crenatum. Gash-crenate, or deeply
cut; as in *Geranium Reichardi*.—*Inciso-
denticulatum*. Gash-toothletted.—*Inciso-
multifidum*.

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multifidum. Gash-multifid.—*Inciso-ferratum*.—Gash-ferrate. These compound words found well in Latin. Persons who think them harsh in English, must use the periphrases.

INCLUDENS calyx. An including or inclosing calyx. Shutting up and concealing the corolla. As in *Phalaris*.—*Includens somnus*. When alternate leaves approximate to the stalk during the night, so that the flower or tender twig is protected between them.

INCLUSA *anthera*. Inclosed within the corolla: as in some sorts of *Erica*. Opposed to *exserta*.

INCOMPLETUS *flos*. Qui caret perianthio aut corolla.—An incomplete flower is destitute either of the perianth or corolla.—In *Delin. Pl.* it is made synonymous with *apetalous*, as it is also by Vaillant. See *Imperfect*. Every apetalous flower is incomplete; but every incomplete flower is not apetalous. An imperfect flower wants one or both the essential parts; an
incomplete

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incomplete flower wants one or both the covers.

INCRASSATUS *pedunculus*. A peduncle incrassated, thickening or becoming thicker towards the flower. As in *Cotula*, *Tragopogon*, and most cernuous flowers. Opposed to *attenuatus*. It is applied also to the scape.

INCUMBENT. *Incumbens*. Leaning upon, or resting against. Applied to the stamens in the class *Diadelphia*—to anthers, which rest upon the filament: opposed to upright, *erecta*—to the divisions of leaves which lie one over another.

INCURVATUS *caulis*. An incurved stem. *Introrsum nutans*. Delin. Pl. bowed or curved inwards—*incurvum folium*; *dum sursum arcuatur versus caulem*; bowed or curved upwards towards the stem. Made to be synonymous with *inflexum* in Philos. Bot.—*aculeus incurvus*; *introrsum flexus*; a prickle, bowed or bent inwards. The terms for angular and curvi-linear bendings ought to be distinct; I usually apply
bent

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bent to the first, and *bowed* or *curved* to the second.

INDIVISUM *folium*. An undivided leaf; in opposition to *fissum*, cloven. See *Integer*.

INERME *folium*. An unarmed leaf; without thorns or prickles. Opposed in *Philos. Bot.* p. 44, to *spinosum*; in 233, to *pungens*.

INFERUM *perianthium*. An inferior perianth. Inclosing the germ; or, having the germ above the receptacle: opposed to *superum*.—*Inferum germen*. An inferior germ. Placed below the perianth.—An inferior perianth implies a superior germ; and a superior perianth implies an inferior germ.—This happy distinction was originally Tournefort's: but his expression of *calyx abit in fructum*, and *pistillum abit in fructum*, was by no means so clear as Linneus's *germen superum* and *inferum*. To understand the difference, we must observe the *situation* of the perianth or germ with respect to the receptacle.—

This

This distinction might be exemplified in innumerable instances: the inferior flower or perianth, and the superior fruit or germ, are in no plants more evident than in Cucumber, Melon, Gourd, Bryony and others of the class *Monœcia*, and the order *Syngenesia*.

INFLATUS. Inflated. Hollow and puffed or blown up like a bladder. Applied to the perianth, as in *Physalis*—to the corolla, as in *Calceolaria*—to the nectary, as in *Cypripedium*—to the pericarp, as in *Fumaria cirrhosa*, and *Colutea*.

INFLEXUS. Inflex or inflected. Bent upwards, at the end, towards the stem. Applied to the leaf; and also to the calyx, when it means only bent inwards. See *Incurvatus*.

INFLORESCENTIA. Inflorescence, or manner of flowering. *Modus quo flores pedunculo plantæ annectuntur.* The various modes in which flowers are fastened to the plant by means of the peduncle. These are—1. *Spadix*. 2. *Cyme*. 3. *Umbel*.

bel. 4. *Spike*. 5. *Ament*. 6. *Strobile*.
 7. *Corymb*. 8. *Raceme*. 9. *Panicle*. 10.
Thyrse. 11. *Fascicle*. 12. *Head* (Capi-
 tulum). 13. *Whorl* (Verticillus). These
 are all explained in their proper places.

INFRACTUS *caulis* f. *culmus*.

Bent in at angle, so as to appear as
 if it were broken: as in *Alopecurus geni-
 culatus*.

INFUNDIBULIFORMIS *corolla*. A funnel-
 shaped corolla. *Monopetala, conica, tubo
 imposita*. Monopetalous; Having a co-
 nical border, rising from a tube. As
 in *Lithospermum, Anchusa, Cynoglossum,
 Pulmonaria, Asperugo, Lycopsis, Tourne-
 fortia*.

INTEGER *calyx*. An entire calyx. Opposed
 to fissus—Exemplified in *Genipa*.—*In-
 teger caulis*. *Simplicissimus, ramis vix
 ullis*. Philos. Bot.—*Simplicissimus, ramis
 angustatis*.—Delin. Pl. where *Simplicissi-
 mus* is explained by *ramis vix ullis*.—In
Philos. Bot. *Integer* is a species of the
Simplex; which means, that the stem is
 continued

continued in one unbroken series from top to bottom—that is, has no branches. How then comes *Integer*, Entire, to have scarcely any branches? Should one not suppose that an *Entire* stalk was unbroken, as well as a *Simple* stalk? I confess my ignorance, in hopes of being better informed.—*Integrum folium*. An entire leaf. *Indivisum, sinu omni destitutum*. Undivided, having no sinus.

Integerrimum folium. A leaf quite or absolutely entire. *Cujus margo extimus integer absque omni crenula est*. Philos. Bot.—*Ipsò margine lineari, nec minimum secto*. Delin. Pl. Having the margin or edge entire, without any notches—or, without being in the least cut. *Integrum* therefore refers only to such sinuations as extend far into the disk of the leaf; and a leaf may be *integrum*, entire, although the edge is indented.

INTERFOLIACEI flores f. pedunculi. Interfoliaceous flowers or peduncles.—*Interfolia opposita, sed alternatim collocati*. Between opposite leaves, but placed alternately

nately with them: as in *Asclepias*. Contrasted with *oppositifolii*.

INTERNODIUM. The internode, or space between knot and knot, or joint and joint. In English we have no term appropriate to this idea, for which reason it seems best to anglicize the Latin term. The joint is properly the articulation itself, from *junctura*; although in common language we use it also for the space between two joints.

INTERRUPTA *spica*. An interrupted or broken spike. Divided by intervals of smaller flowers. As in *Mentha spicata*.

INTERRUPTA *pinnatum folium*. An interruptedly pinnate leaf. *Foliolis alternis minoribus*. Having smaller leaflets between each pair of larger ones.

INTORSIO. *Flexio partium versus alterum latus*. Philos. Bot.—In *Delin. Pl.* it is called *Torsio*, and is thus explained. *Directio plantæ in unam alteramve plagam a verticali diversam*.—The writhing, bending,
ing,

ing, turning, twining or twisting of any part in a vegetable towards one side or other—or, in any direction from the vertical. Thus the stem in some plants twines from right to left; as in *Tamus*, *Dioscorea*, *Rajania*, *Menispermum*, *Cissampelos*, *Hippocratea*, *Lonicera*, *Humulus*, *Helxine*.—In others from left to right; as in *Phaseolus*, *Dolichos*, *Clitoria*, *Glycine*, *Securidaca*, *Convolvulus*, *Ipomæa*, *Cynanche*, *Periploca*, *Ceropegia*, *Euphorbia*, *Tragia*, *Basella*, *Eupatorium*, *Tournefortia*. It is also applied to the Clasper or Tendril; as in Leguminous plants, *Vine*, *Bryony*. In this last it is observed by Grew, that the tendril having made two or three turns one way, is then directed the contrary way, in order to be more sure of its hold. To the corolla, which, twists to the left in *Asclepias*, *Nerium*, *Vinca*, *Rauwolfia*, *Periploca*, *Stapelia*—to the right in *Pedicularis*, *Trientalis*, *Gentiana*.—It is applied also to the Pistil and Germ—to the Spike—to the Awn, as in the *Wild Oat*—to the beak of the Seed, as in *Geranium*—to the peduncle,

I N

as in *Mnium hygrometricum*.—When we speak of right and left, we suppose the spectator to have his face turned towards the south. See *Twining*.

INTORTUS *stylus*. A style twisted inwards.

INTRAFOLIACEÆ *stipulæ*. Intrafoliaceous stipules. Growing above or within the leaves.

Inversely heart-shaped. See *Obcordatum*.

INVERTENS *somnus*. When during the night the more tender surface of the leaves is protected, by being inverted.

INUNDATÆ. The name of the forty-fifth order in Linneus's Fragments of a Natural Method; and the fifteenth of the Natural Orders in *Gen. Pl.*—Containing such plants as grow naturally in the water.

INVOLUCRUM. An involucre (from *involvere*, to wrap up). *Calyx (umbellæ) a flore remotus*. A calyx remote from the

I N

the flower; particularly in the umbel, but applied also to the whorl and other kinds of inflorescence.

Involucrum universale. A universal or rather general involucre; placed at the origin of the universal or general umbel.—*Partiale.* A partial involucre; at the origin of the partial umbel.—*Proprium*, a proper involucre; placed beneath a single flower.

Involucres are *one-leaved*, &c. or *many-leaved*, according to the number of leaves of which they are composed. *Involucrum monophyllum*, &c. *polyphyllum*.

Involucrum dimidiatum. A dimidiate or halved involucre. *Ab altero latere deficiens*; deficient on one side.

Involucratus. Involucrated. Having an involucre. As umbels, whorls, &c.

Involucellum. An Involucret. A little or partial involucre. (Partial Fence, *Withering*.) As in Umbellate plants and *Euphorbia*.

INVOLVENS *foliatus*. When the leaflets of
P 2
compound

compound leaves, during the night, approach by their tips only, making an arch or hollow underneath.

INVOLUTA *foliatio* f. *vernatio*. Involuted foliation or vernation. *Quum margines laterales (foliorum in gemma) utrinque introrsum spiraliter involvuntur.* Philos. Bot. *Foliorum lateribus utrinque spiraliter contortis versus superiorem paginam.* Delin. Pl. When leaves within the bud have their edges rolled spirally inwards on both sides towards the upper surface. As in *Lonicera*, *Euonymus*, *Pyrus*, *Populus*, *Viola*, &c.

JOINT. *Articulus*. According to Linneus, that part of a culm which lies between two knots. See *Internodium*.

JOINTED. *Articulatus*. Applied to the root, in *Lathræa*, *Oxalis*, *Martynia*, *Dentaria*—to the stem or culm, in corn and grasses—to the leaves, when one leaflet grows from the top of another—to the spike, peduncle, petiole, capsule, silique and legume.

IRREGU-

IRREGULARIS corolla. An irregular corolla.

Quæ limbi partibus, figura, magnitudine, aut proportionē diversa est. Philos. Bot.

In Delin. Pl. we read *et proportionē*.

Different in the figure, size, or proportion of the parts of the border. I prefer the disjunctive, because a diversity in any of the above-recited circumstances is sufficient to produce an irregularity.—The term is originally Rivinus's, whose arrangement is founded on the regularity or irregularity of the corolla. Jungius expressed the idea by the term *difformis*—Ray, Tournefort and others by *Anomalous* (*flos*).—Dr. Berkenhout's explanation gives Jungius's idea.—An irregular flower is that whose parts want uniformity.

JUGUM. A yoke, couple, or pair of leaflets.

—Hence *folium conjugatum*, a leaf paired or having one pair of leaflets, of which there are many instances in the class *Diadelphia*.

JULUS. A Catkin or Ament. For this term of Tournefort's and others, Linneus sub-

stituted *Amentum*. Hence Herman and others had a class of trees entitled *Julifera*.

K

KEEL. *Carina*. The lower petal of a papilionaceous corolla, inclosing the stamens and pistil: usually shaped like a boat.

Keeled. *Carinatus*. Having a longitudinal prominence upon the back. Applied to the leaf, calyx and nectary.

KIDNEY-SHAPED leaf. *Folium reniforme*. Roundish, and hollowed at the base without angles. Applied also to the anther and seed, which being solid bodies, have really the form of a kidney; whereas a leaf, being a plane surface, resembles the section of a kidney. This distinction is to be observed in several other cases.

Kneed or *Knee-jointed*. See *Geniculatus*.

KNOT.

K N

KNOT. *Nodus.* A protuberant joint in the stem of some plants, particularly in corn and grasses. An admirable provision to strengthen their otherwise weak hollow culms.

KNOTTED or Knotty. *Nodosus.* Having knots or swelling joints.—The terms *Articulatus*, *Geniculatus*, and *Nodosus*, do not seem to be well distinguished by Linneus. The first appears to me to mean *jointed* in general; the last—jointed with a swelling or protuberance. The difference between this and the second has been already explained under *Geniculatus*.

KNOTLESS. *Enodis.* Without knots. *Continuus absque articulis.* Applied to a stem: In this explanation there is a confusion between *nodus* and *articulus*, and the latter is put for the knot itself; whereas in another place Linneus puts it for the space between the knots. See *Joint*.

L

LABIATUS *flos*. A Labiate or lipped flower. This is a term of Tournefort's. Linneus uses the term *Ringens*, including under it both Labiate and Personate flowers. In Delin. Pl. *Ringens* (corolla) is made synonymous with *Labiate*. This term is applied likewise to the calyx. See *Ringens* and *Personata*.

The confusion would be cleared up, if we might be allowed to put *Labiate*, for an irregular monopetalous corolla, with two lips; and to appropriate the term *Ringent*, to such as have the lips gaping or open—*Personate*, to such as have them closed.

Labium, the lip, is usually applied by Linneus to both lips of a labiate corolla, with the distinction of superior and inferior. But it is sometimes used for the lower lip in opposition to the upper lip, which is then called *Galea*, the helmet.

L A

LACERA corolla. A lacerated corolla. (Ragged, *Withering*.) *Cujus limbus tenuissime dissectus est.* Having the border very finely cut.

Lacerum folium. A lacerated leaf. *Quod margine varie sectum est segmentis difformibus.* Having the edge variously cut into irregular segments—as if it were rent or torn.

LACINIA corollæ. *Quævis pars in quam limbus corollæ monopetalæ dissectus est.*—Any part into which the border of a monopetalous corolla is cut. It is applied also to monophyllous calyxes: and a calyx which has two *laciniæ* is said to be *bifidus*, &c. *Philos. Bot.* p. 63.

LACINIATUS. Jagged. *Folium laciniatum, Varie sectum in partes, partibus itidem indeterminate subdivisis.* This implies an irregularity in the division and subdivision, whereas *lacinia* is the same with a part, segment or cleft; as *Linneus* has explained it.

Laciniatus flos, is a term of *Tournefort's*,
for

for which Linneus puts *multifida corolla*.

Lacinula. Dimin. from *Lacinia*. A little jag, or subdivision of the larger one.

LACTESCENTIA. Lactescence or Milkiness.

Copia liquoris, qui effluit læsa planta.

The liquor which flows abundantly from a plant, upon its being wounded. It has the name from the juice being commonly white, like milk: as in *Euphorbia*, *Papaver*, *Asclepias*, &c. *Campanula*, &c. and many of the plants in the first division of the class *Syngenesia*.—It is however yellow in *Chelidonium*, *Bocconia*, *Sanguinaria*, *Cambogia*: and red in *Rumex sanguineus*.

LACUNOSUM *folium*. A lacunose or pitted leaf. *Disco depresso inter venas interjectas*. When the disk is depressed between the veins. Contrary to *rugosum*, wrinkled, in which it rises.

LÆVIS. Even, level, very smooth, polished.

This term does not occur in *Philosophia Botanica*. In *Delin. Pl.* it is applied to the

L A

the stem, and is explained to be *superficie æquali*. Having an even surface. Opposed to *striatus* and *fulcatus*, streaked and furrowed or grooved. Whereas *glaber*, smooth, is opposed to *asper*, *scaber*, &c. rough and rugged.—The *Even* stem is exemplified in *Chelidonium hybridum*.

In leaves it is commonly used in opposition to *rugosum*, &c. and therefore means an even level surface: as in *Statice Limonium*. And yet in *Crotalaria incanescens*, Lin. Suppl. 323. *lævis* is opposed to *albo-tomentosus*. In *Ethulia divaricata*, it is opposed to *pubescens*. And in Philof. Bot. *Glaber* is interpreted to be, *superficie lævi*. The French translate it *lisse*. There is classical authority for *lævis* being not only *planus*, *politus*, *tactu non asperus*, as *læve clypeum*; but also *glaber*, *depilatus*. Perf. Sat. 1. & Virg. Ecl. 6, &c.

LAMELLA. A thin plate. Applied to the plates of which the under part in some Funguses is composed: hence these are called *lamellated* or *lamellous* Funguses.

Gills

L A

Gills is the common English name for *lamellæ*.

LAMINA. The border. *Corollæ polypetalæ pars superior patula*. The upper, broad or spreading part of the petal, in a polypetalous corolla. Called *limbus*, in a monopetalous corolla.

LANA. Wool. *Pili curvi densi*. Delin. Pl. —*servans plantas ab æstu nimio*. Philos. Bot. Crooked or curling, close, thick hairs: the principal use of which is to defend plants against too great a degree of heat.—As in *Salvia canariensis*, and *Æthiopis*. *Sideritis canariensis*. *Marrubium*. *Verbascum*. *Stachys*. *Carduus eriocephalus*. *Onopordum*. See *Wool*.

Lanatus. Woolly. Applied to the stem; as in *Stachys germanica*, &c.—*Lanatum folium*. A woolly leaf. *Quasi tela araneæ indutum*—to which is added in Delin. Pl. —*pilis sponte curvatis*. With a covering resembling a spider's web, composed of hairs curling spontaneously: as in *Salvia* and *Sideritis*.

Sublanatus.

L A

Sublanatus. Somewhat woolly.

LANCEOLATUM *folium.* A lanceolate leaf.

Oblongum utrinque sensim versus extremitatem attenuatum. Oblong, and gradually

tapering towards each extremity: like the head of a lance.—Exemplified in

Plantago lanceolata.—Some call it spear-shaped, others lance-shaped or lanced;

but *Lanceolate* appears to me in all respects preferable.—It is applied also to

the *Stipule*, *Bracte*, and *Perianth*.

Lanceolato-ovatum *folium.* A lanceolate-

ovate leaf; partaking of both forms, or between both; but inclining more to

the latter. An *Ovate-lanceolate* leaf, on the contrary, would incline more to the

lanceolate. This is a general rule with respect to these compound words.

LANUGO. Down. *Pili molles plantarum*

partes vestientes. Soft hairs clothing the parts of plants.

LATERIFOLIUS *flos* s. *pedunculus.* *Ad latus*

baseos folii. By the side of the base of the leaf.

leaf. As in *Claytonia*, *Solanum*, *Asperifoliae*.

LATTICED. *Cancellatus*. Applied to the involucre in *Atractylis cancellata*. And to the capsule of Lily.

LAXUS, in Philos. Bot. synonymous with *flaccidus*, and opposed to *strictus*.—*Libere in arcum flexibilis*. Delin. Pl.—A lax, loose, flaccid, or flexible stem. Easily bent, in opposition to stiff.—It is applied also to the glume.

LEAF. *Folium*. The organ of motion in a vegetable. Transpiring and attracting air and moisture, as the lungs do in animals; and affording shade to the vegetable. In reality, however, leaves are rather analogous to the muscles, although they be not as in them fixed by a tail, because in vegetables there is no voluntary motion. Leaves are either, 1. *Simple*, having one leaf only on a petiole, or proceeding from the same point—or, 2. *Compound*, having several leaves to one petiole: the component leaves are called.

LEAFLETS.

L E

LEAFLETS. *Foliola*. Others call them *Leaflets*. But I follow the analogy of the language in forming diminutives. For the same reason, if we use *leaf*, we must not use *foliole*.

LEAFLESS. *Aphyllus*. Destitute of leaves. Applied to the stem and branches.

Leaf-stalk. See *Petiolus*.

LEAFY. *Foliatus*. Furnished with leaves: in opposition to *leafless*.—Or abounding in leaves, contrasted with such stems as have few.—It is applied not only to the stem, but to the head, spike, raceme and peduncle.

Leathery or *leather-like*. See *Coriaceous*.

LEGUMEN. A Legume. (*Alegendo*, Pulse being commonly gathered by hand.) *Pericarpium bivalve, affigens semina secundum futuram alteram tantum*.—A pericarp of two valves, in which the seeds are fixed along one future only. It is usually of a membranaceous texture, and commonly one-celled. Some legumes however are two-celled — others jointed — others again divided

L E

divided transversely into several cells (*isthmis intercepta*), by contracting between the seeds.—The old English word was *Cod*: and the Legume of a Pea is still called a *Peas-cod*.—Pod is used both for the legume and filique indifferently: but they are so distinct that they ought not to have the same appellation. It seems better, therefore, to anglicize the Latin terms: and with respect to this, it is become sufficiently familiar to the English ear. Dr. Withering calls it the *shell*.

LEGUMINOSÆ. Leguminous plants. Such as have a legume for the pericarp. The same with the *Papilionacei* of Tournefort. It is one of Ray's classes. The order *Decandria* of the class *Diadelphia* in Linneus's system, contains these plants.

LENTICULARIS *scabrities* (from *Lens*, a lentil). A sort of small glandular roughness, resembling small lentils, on the surface of some plants. See *Scabrities*. Applied also to the capsule, in *Allamanda*, and then alluding merely to the shape.

Level-

Level-topped. See *Fastigiatus*.

LIBER. (According to Scaliger, *quasi liber, quia de arbore reluatur, f. resolvatur*, or to use Cato's word *glubatur*. As from *cresco* comes *creber*; from *facio*, *faber*; from *suo*, *suber*; so from *luo* comes *luber*, and thence *liber*.—But a more probable derivation is from the Æolic λεπορ for λεπος, which by changing π into Ϸ became λεϷηρις.)—*Tegmentum tertium membranaceum succidum flexile*. The inner bark of a vegetable; or the third integument, membranaceous, juicy and flexible. The wood is gradually formed from this; and according to Linneus, the corolla is a continuation of it. See *Substantia*.

LIGNOSUS caulis. A woody stem. Opposed to herbaceous.

LIGNUM. The wood, or woody part of the trunk.—*Liber præcedentis anni, nunc exsuccus, induratus, agglutinatus*. The *liber*, or inner bark of the preceding year, deprived of its juice, hardened, and glued fast together.

LIGULATUS (from *ligula*, a strap; which some derive from *ligo*, to bind; others from *lingula* dimin. of *lingua*, a tongue; the first from its office, the second from its shape) *flos*. *Ligulata corolla*. A ligulate or strap-shaped flower. A species of Compound flower, in which the florets have their corollets flat, spreading out towards the end, with the base only tubular. *Cum corollulæ flosculorum omnes planæ, versus exterius latus expansæ sunt*. These are the *Semi-flosculosi* or Semi-floscular flowers of Tournefort; and are comprised in the first division of the first order of Linneus's nineteenth class, *Syngenesia Polygamia Æqualis*.

LILIA. The name of the third nation, tribe, or cast of vegetables, in Linneus's *Regnum Vegetabile*, containing the Patri-cian rank, eminent for their splendid flowers.

Liliacea corolla. A liliaceous corolla: having six regular petals.

Liliacæ. Liliaceous or Lily-like plants.
The

L I

The name of one of Tournefort's classes. Also of the tenth order in Linneus's Fragments of a Natural Method. They are divided among several (9—11) orders, in the *Ordines Naturales*, at the end of Linneus's *Genera Plantarum*.— This fine natural class is to be found in the class *Hexandria* of Linneus's Artificial System.

LIMBUS. The border or upper dilated part of a monopetalous corolla. Since we have only the word *border* in English, to express the upper spreading part, both in this and the polypetalous corolla, it would perhaps be better to preserve the Latin terms *limbus* for the first, and *lamina* for the second. For *limb* applied to border we have the authority of the astronomers.

LINEA or line. The twelfth part of a Paris inch. The breadth of the crescent at the root of the finger nail. See *Measures*.

LINEARE folium. A linear leaf. *Æquali ubique latitudine, interdum utraque extre-*

mitate tantum angustatur. Of the same breadth throughout, except sometimes at one or both ends. As in Grasses, Rosemary, &c.—Applied also to the *petiole, involucre, perianth, petals, spike*, &c.

Lineari-cuneiforme. Linear-wedged-shaped. Between both, but inclining more to the latter.

Lineari-lanceolatum. Linear-lanceolate.

Lineari-subulatum. Linear-subulate.

LINEATUM folium. A lineate leaf. *Nervis depressis.* The surface slightly marked longitudinally with depressed parallel lines. *Lined* is improper, as being used in a different sense.—This term has been sometimes confounded with *linear*, which respects the form of the leaf. The terms being so alike, and this occurring seldom, it may perhaps be better to write—a leaf marked with lines.

LINGUIFORME, f. lingulatum folium. A tongue-shaped leaf. Linear and fleshy, blunt at the end, convex underneath, and having

having usually a cartilaginous border, as in *Mesembryanthemum*, *Aloe*, *Hæmanthus coccineus*.

Lingulatus flos. A term of Pontedera's. The same with *ligulatus*; which see.

Lip. See *Labium*.

LOBUS. A lobe. The part into which some simple leaves are divided.—Also the *placenta*, or main body of the seed destined to nourish the heart, splitting usually in two; these parts are called the lobes. See *Cotyledon*.

LOBATUM folium. A lobate or lobed leaf. *Divisum ad medium in partes distantes, marginibus convexis*. Divided to the middle into parts distant from each other, with convex margins.—The latter clause is omitted in *Delin. Pl.* and yet it seems necessary to distinguish this from *folium fissum*, the cleft or cloven leaf.—These leaves take the names of *bilobate*, *trilobate*, &c. or *two-lobed*, *three-lobed*, &c. from the number of lobes into which they are divided.

LOCULAMENTUM pericarpîi. The cell of a pericarp or fruit. *Concameratio vacua pro seminum loco.*—*Pericarpium uniloculare, biloculare, &c.* A unilocular or one-celled; a bilocular or two-celled pericarp. If any one should dislike these compound words, he may write—a pericarp of one cell—of two cells, &c. And this may serve as a general rule in the like cases.

Loculus. The little cell of an anther containing the pollen. *Loculi — divisiones laterales, tunicis factæ.*

LOMENTACEÆ. (*Lomentum*, a sort of colour in Pliny, *a lotu*, being made by washing. But it also signifies *farina fricta*, parched meal, or, according to others, *farina fabacea*, bean meal.) The name of the fifty-sixth order in Linneus's *Fragments*; and of the thirty-third in his *Ordines Naturales*.

LOOSE. *Laxus.* Which fec.

LUCIDUM folium. *Quasi illuminatum.* *De-lin, Pl.*—Bright, shining, as it were illuminated.

L U

minated. See *Nitidum*.—Dr. Berkenhout understands it to mean *clear, transparent* : and Dr. Withering uses the word *transparent* for it.

LUNULATUM folium. *Subrotundum, basi excavatum, angulis posticis notatum.* Philof. Bot.—In Delin. Pl. it is called *Lunatum*, and the explanation is somewhat differently worded—*subrotundum, basi sinu divisum, angulis posticis acutis*.—It is singular that Dr. Berkenhout, who seldom gives any equivalent English terms, should translate *lunatum*, moon-shaped ; and *lunula*, a half-moon ; though he explains it, rightly enough—shaped like a small crescent. In which sense only it is used in botany ; though among the ancients *lunatus* is put for the shape of the moon, both when full and in a crescent.

Lunulata is applied to the keel of the flower in *Polygala myrtifolia*. Also to the stipule and spike.—See *Crescent-shaped*.

LURIDÆ. (*Luridus*, a dusky or livid colour. Linneus makes it synonymous with

fuscus.) The name of the thirty-third order in Linneus's Fragments, and of the twenty-eighth in his *Ordines Naturales*.

LUXURIANS flos. A luxuriant flower, *Tegmenta fructificationis ita multiplicat, ut essentielles ejusdem partes destruantur*. Multiplies the covers of the fructification so as to destroy the essential parts.—Luxuriancy is either *Multiply*, *Full* or *Proliferous*. All Luxuriant flowers are *Monsters*; but *full* flowers only (*Pleni*) are absolutely barren.

LYRATUM folium. A Lyrate or Lyre-shaped leaf. *Transversim divisum in lacinias, quarum inferiores minores remotiores*.—Divided transversely into several jags, the lower ones smaller and more remote from each other than the upper ones. As in *Geum urbanum*.—This is one of the Compound leaves, and yet the figure (n. 76.) to which Linneus refers, is a simple leaf, not at all like that of *Geum urbanum*.

MA

M

MALE flower. *Masculus flos.* Bearing
stamens only, without pistils; or at least
wanting the stigma.

Male plant. *Planta Mas.* Producing only
male flowers. Otherwise called barren,
or abortive.

Many-cleft or Multifid leaf. See *Cleft* and
Fissum.—It is applied also to the Co-
rolla.

Many-flowered glume and perianth. *Gluma
multiflora. Perianthium multiflorum.* In-
closing several flowers.—Many-flowered
peduncle and stem. *Pedunculus & caulis
multiflorus.* Supporting several flowers.

Many-fold corolla. See *Multiplex* and
Multiplicatus.

Many-leaved calyx or tendril. *Polyphyllus.*

Many-parted leaf. *Folium multipartitum.*
See *Partitum, Parted*.

Many-

M A

Many-petalled corolla. *Polypetala*. Opposed by Linneus to a monopetalous or one-petalled corolla. Other writers have commonly given separate names to the corolla, according to the number of petals, as far as six; calling the rest polypetalous. Linneus also makes the distinction of *dipetalous*, *tripetalous*, &c. but calls them all polypetalous.

Many-valved glume. *Multivalvis*. Consisting of more than two valves, which is the common number.

MARCESCENS f. MARCIDUS. Withering, Shrivelling. *Contabescit nec decedit*. Decaying without falling off. Applied to the perianth, in the class *Diadelphia*: and to the corolla, in *Campanula*, *Orchis*, *Cucumis*, *Cucurbita*, *Brvonia*, &c.

MARROW. *Medulla*. The pith of a vegetable. The inner vesicular substance, or that which clothes the inner surface of a hollow trunk.

Masculus flos. A male or barren flower.

MASKED

MASKED corolla. See *Personata*.

MEASURES. Linneus seldom makes use of any other measure besides the proportion between the parts. Since plants vary exceedingly in the size both of the whole and all the parts, he has discarded geometrical measures, and has adopted others taken principally from the human hand and arm.

1. *Capillus*. A Hair. The diameter of a hair. *One-twelfth of a line*.
2. *Linea*. A Line. The length of the little crescent at the root of the finger nail. *One-twelfth of an Inch*.
3. *Unguis*. A Nail. The length of a nail. *Half an Inch*.
4. *Pollex*. An Inch. The length of the first joint of the thumb.
5. *Palmus*. A Palm, or hand. The breadth of the four fingers. *Three Inches*.
6. *Spithamia*. A short Span. The space between the end of the thumb and
of

M E

of the fore-finger extended.—*Seven Inches.*

7. *Dodrans.* A long Span. The space between the end of the thumb and of the little finger extended.—*Nine Inches.*

8. *Pes.* A Foot. From the bend of the elbow to the base of the thumb.—*Twelve Inches.*

9. *Cubitus.* A Cubit. From the bend of the elbow to the end of the middle finger.—*Seventeen (Paris) Inches : or something more than eighteen inches English.*

10. *Brachium.* An Arm. From the arm-pit to the end of the middle finger.—*Twenty-four Inches,*

11. *Orgya.* A Fathom. The height of a man, or the space between the ends of the fingers when the arms are extended.

Observe that the above geometrical measures follow the French standard; and that the English foot is eleven

M E

eleven inches and a quarter French, nearly. *Our hand is the breadth of the palm, or about four inches. And the Roman palm is 8. 78 for architecture, and 9. 79 in buying goods; English measure.*

MEDIOCRIS. Of a middling length. Applied to a petiole, that is of the same length with the leaf. When it is shorter than the leaf, it is said to be *brevis*, short; when it surpasses the length of the leaf, it is called *longus*, long.

MEDULLA. Marrow or Pith. *Substantia intima vesiculosa, internumve parietem trunci cavi obducens. Regn. Veget.— Crescit extendendo se & integumenta.— Fibræ medullaris extremitas per corticem protensa solvitur in gemmam imbricatam ex foliolis nunquam renascituris. Philos. Bot. See Marrow.*

MEMBRANACEUS. The substance of parchment. *Membranacea stipula.* A membranaceous stipule; as in *Arenaria rubra.* — *Membranacea valvula.* — *Membranaceus calyx*

calyx—petiolus, complanatus more folii; flattened like the leaf itself.—*Membranaceum folium*; a membranaceous leaf. *Quod inter utramque superficiem nulla evidenti pulpa scatet.* Having no distinguishable pulp between the two surfaces.

MEMBRANATUS *caulis.* A membraned stem. *Complanatus more folii.* Flattened like a leaf.

MENSURA. See *Measures.*

METEORICÆ *vigiliæ.* When flowers open and shut according to the temperature of the air. See *Vigiliæ.*

MID-RIB. The main nerve or middle rib of the leaf, running from the base or petiole to the apex, and from which the veins of the leaf usually arise and spread. See *Rachis*, and *Rib.*

MONADELPHIA. (*Μονος* and *αδελφος* *one brotherhood.*) The name of the sixteenth class in the Linnæan System. Comprehending those plants which have hermaphrodite flowers, with one set of united stamens.

M O

stamens. They form a natural class, entitled *Columniferæ*.

MONANDRIA. The name of the first class in the Linnean System, comprehending those plants which have only one stamen in a hermaphrodite flower.

MONOCOTYLEDONES *plantæ*. Plants which have only one cotyledon or lobe in the seed; as *Grasses*, *Palms*, and *Liliaceous plants*. Linneus remarks that these are more properly *Acotyledonous*, since the cotyledon continues within the seed.

MONŒCIA. (*Μονος*, and *οικος* a house.) The name of the twenty-first class in the Linnean system; comprehending the androgynous plants, or such as produce male and female flowers, on the same individual, without any mixture of hermaphrodites.

MONOGYNIA. The name of the first order, in each of the thirteen first classes of the Linnean system. Comprehending such plants as have one pistil, or stigma only, in a flower.

MONO-

MONOPETALA corolla. A monopetalous or one-petalled corolla. The whole in one petal. It may be cut deeply, but is not separated at the base. Exemplified in *Convolvulus*, *Primula*, &c.

The most remarkable forms of the monopetalous corolla are the *Bell-shaped*, *Funnel-shaped*, *Salver-shaped*, *Wheel-shaped*, and *Labiate*.

MONOPHYLLUM (*μονος*, and *φυλλον* a leaf) *perianthium*. A monophyllous or one-leaved perianth. All in one; if cut, not separated to the base. As in *Datura*, *Primula*. Applied also to the *Involucre*.

MONOSPERMA planta. A plant that has one seed to each flower. As in *Polygonum*, and *Collinsonia*. A monospermous or one-seeded plant.—*Monosperma bacca*. A one-seeded berry; called *monopyrena* by the older botanical writers.

MONOSTACHYOS (*μονος*, and *σῆαχος* a spike) *caulis*. A stem bearing a single spike.

Moon-

Moon-shaped. See *Lunulatum* and *Crescent-shaped*.

Mosses. See *Musci*.

MOUTH. Os. The opening of the tube in the corolla.

MUCRO. (From *μακρος*, *long*, according to some; from *μικρος*, *small*, according to others.) A dagger-point. Hence

Mucronatum folium. A dagger-pointed leaf. Terminating in a sharp point like a dagger; as in *Bromelia Ananas*. Applied also to the calyx.—The diminutive *mucronulatum* is sometimes used.

MULE plant. See *Hybrida*.

MULTANGULARIS f. *Polygonus caulis.* A multangular stem. Having several corners.

MULTICAPSULARE *Pericarpium.* A multicapsular pericarp; or, a fruit of many capsules. Having several pericarps succeeding to a flower. As in *Caltha*, *Trollius*, *Helleborus*.

M U

MULTIDENTATA *corolla*. A many-toothed corolla. *Cujus limbus aut petala margine dissecta sunt*. Having the border (in a monopetalous corolla) or the petals (if it be polypetalous) cut about the edge.

MULTIFIDUM *folium*. A multifid or many-cleft leaf. Divided into several parts by linear sinuses and straight margins. See *Fissum* and *Cleft*.

Multifidus cirrus. A many-cleft tendril.
Multoties divisus. Divided and subdivided several times.

Multifida corolla. A many-cleft corolla. The same with *laciniatus flos* of Tournefort. Exemplified in *Convolvulus Soldanella*.

MULTIFLORUS. Many-flowered. Common to several flowers.—*Caulis*. A many-flowered stem; as in several species of *Iris*, &c.—*Scapus*. A many-flowered scape; as in *Primula officinalis*, *Auricula*, *Polyanthus*, &c.—*Calyx*; as in *Scabiosa*, and the class *Syngenesia*; when the com-
ponent

M U

ponent flowers are called *florets* or *flos-cules*.—*Pedunculus*. A many-flowered peduncle; as in *Browallia elata*.

MULTILOCULARE *pericarpium*. A many-celled pericarp. Divided internally into several cells; as in *Nymphæa*.

MULTIPARTITA *corolla*. A many-parted corolla. *Multipartitum folium*. A many-parted leaf. Divided into several parts almost to the bottom.

MULTIPLEX *Corolla, radius*. Many-fold, or having petals lying over each other in two or more folds or rows.

MULTIPLICATUS *flos*. A multiplied flower. A sort of Luxuriant flower, having the corolla multiplied so far as to exclude only some of the stamens.—The perianth and involucre seldom, the stamens scarcely ever, constitute a Multiply flower. It is called a *Double*, *Triple*, or *Quadruple* flower, according to the number of rows in the multiplied corolla: and a double flower is the lowest degree of it, or the

first essay towards fulness.—In common language we improperly call all these variations Double flowers.

Polypetalous flowers are not unfrequently multiplied; as in *Ranunculus* and *Anemone*. Monopetalous flowers are very subject to this variety; but very seldom become full, or lose all their stamens.

MULTISILIQUEÆ. The name of the twenty-third order in the Fragments of a Natural Method, in *Philos. Bot.*; and of the twenty-sixth in the *Ordines Naturales*, at the end of Linneus's *Genera Plantarum*. Comprehending those plants which have several siliques or pods succeeding to each flower. As *Columbine*, *Hellebore*, &c.

MULTIVALVIS *gluma*. A multivalve or many-valved glume. Having more than two valves.

MUNIENS *somnus*. When the upper leaves of a plant, which during the day had spread out horizontally on long petioles, drop them at night, and hang down so

M U

as to form an arch all round about the stem.

MURICATUS. Muricated. *Punctis subulatis adspersus.* Having subulate points scattered over it; or armed with sharp prickles, like the *Murex* shell-fish.—Applied to the stem—to the calyx, as in *Crepis biennis*—to the pod, as in *Bunias*—to the seeds, as in *Caucalis*, *Ammi*.

Hence we have

MURICATÆ for the name of the eleventh order in Linneus's Fragments of a Natural Method.

MUSCI. Mosses. The third of the Families, and the seventh of the Nations or Casts, into which Linneus has distributed all Vegetables.—The sixty-fifth order in his Fragments; and the fifty-sixth of his *Ordines Naturales*.—They form the second order of the class *Cryptogamia*, in his Artificial System.

Hedwig has made considerable discoveries with respect to the fructification of Mosses.

MUTICUS.—Awnless.—Opposed to *aristatus*, awned, in *Philos. Botan.*—*Mutica gluma*; *acumine destituta*. Without any point at the end. *Delin. Pl.*—In this sense we have *Arista mutica*: which can mean only blunt, or having no *acumen* or sharp point. This term is applied to the calyx in *Serratula*; and to the anthers in *Erica herbacea*.

MUTILATUS f. *Mutilus flos*. A mutilated flower. Not producing a corolla, when it ought regularly to do it. This defect is commonly owing to a want of sufficient heat, either from climate or situation; sometimes it is the effect of culture.

N

NAKED. *Nudus*. When applied to the Stem or Trunk of a vegetable, it signifies, that it is without leaves, fulcres or arms. *Qui foliis, fulcris & armis caret*. *Delin. Pl.*
—In

—In Philos. Botan. it is said only to be destitute of leaves, but that is expressed by the term *aphyllus*, leafless.—When applied to the Leaf, it signifies, that it is destitute of all pubescence. *Setis ac pilis destitutum*: Delin. Pl. and is opposed to *tectum*, covered, in Philos. Bot. p. 233.—When applied to the Flower, it implies, that the calyx is wanting; but it would be more properly called a naked flower, if the corolla were wanting as well as the calyx; however, it rarely happens that a flower is destitute of both. *Philos. Bot.* p. 76.—When applied to the Receptacle, it means, that it is without hairs, bristles or chaffs.—When applied to a Head of flowers (*Capitulum*), it is opposed to *foliosum*, and implies that it has no leaves on it.—When applied to a Whorl (*Verticillus*), the meaning is, that there is no involucre or leaves. In the same sense it is applied to the Raceme, Petiole, Peduncle, &c.

NAP. *Tomentum*. Soft interwoven hairs scarcely discernible.

NAPPY or Tomentose. *Tomentosus*. Covered with a whitish down, or with hairs interwoven and scarcely distinguishable. As the leaves of *Cerastium tomentosum*, &c.

NATANS *folium*. A floating leaf. Placed on the surface of the water, in many aquatic plants; as *Nymphaea*, *Potamogeton*.

Nations. See *Gentes*.—The sense in which the word *Cast* is used in the east Indies, best expresses the idea which Linneus seems to have affixed to this word.

NATURAL CHARACTER of Vegetables, is that which delivers all possible certain characteristic marks of the fructification: and may therefore be used under any system or arrangement.—Such characters are given by Linneus in his *Genera Plantarum*; from the number, figure, situation and proportion of the parts; rejecting taste, smell, colour and size.

NATURAL CLASS. An assemblage of several genuses of plants, agreeing in their parts

parts of fructification, general appearance and qualities. We have instances of such in the *Umbellatæ*, *Verticillatæ*, *Siliquosæ*, *Leguminosæ*, *Compositæ*, *Gramina*, &c.

NAVICULARIS f. *Cymbiformis Valvula*. A boat-shaped valve. As in *Isatis* and *Tblaspi*.

NECESSARY Polygamy. *Polygamia Neceffaria*. The name of the fourth order in the class *Syngenesia*; wherein the hermaphrodite florets of the disk, for want of a stigma, are barren; but the female florets of the ray, being impregnated by the pollen from the others, bear perfect seed.

NECK. *Collum*. The upper part of the tube in a corolla of one petal.

NECTARIUM. The Nectary, or melliferous part of a vegetable, peculiar to the flower. It commonly makes a part of the corolla, but is sometimes entirely distinct from it, and is then called a *Proper* Nectary. It is frequently in form of a horn or spur: sometimes

sometimes it takes the shape of a cup, whence this part is named in English by some the *Honey cup*.—Those who prefer the Latin termination use *Nectaria* in the plural, which is not English. Why do they not use *filamenta*, *stigmata*, &c.?

NERVOSUM folium. A Nerved leaf. *Quum vasa simplicissima absque ramulis extenduntur a basi versus apicem.* Having vessels perfectly simple and unbranched, extending from the base towards the tip. As in *Plantago lanceolata*.—It is applied also to the stipule. Nervous has other appropriate senses, and therefore to be avoided.

NESTLING. *Nidulans.* Applied to seeds which lie loose in pulp or cotton, within a berry or other pericarp.

NITIDUM folium. Glittering, glossy. *Quod glabritie lucidum est f. glabritie lucente.* So smooth as to shine. Opposed to *Opaque*. Exemplified in *Ferula* and *Angelica canadensis*.—*Nitidum germen*, a glossy germ, as in *sweet-brier*.

NODDING,

NODDING. *Nutans.* When applied to a stem it is explained to mean, bent down outwards from the top:—when applied to a flower it signifies that the peduncle is considerably curved, but not so much as in the *flos cernuus*; which, as the term implies, points directly to the ground.

NODUS. See *Knot*.—*Nodosus caulis: geniculis crassioribus interceptus.* See *Knotted*.

Notched leaf. *Folium crenatum.* See *Crenate*, which is a better term.

Nucamentum; the same with *Amentum*. Hence *Nucamentaceæ*, the name of the seventeenth order in Linneus's Fragments of a Natural Method.

NUCLEUS. A Kernel. The seed of a nut and of stone fruits, contained within a shell—*Putamen*.

Nudus. See *Naked*.

Nudiusculus. Almost, or rather naked.

NUT. *Nux.* A seed covered with a shell.
Extending

Extending not only to Nuts, commonly so called, but to the Acorn, and all Stone-fruits.

NUTANS. See *Nodding*.—*Nuto* properly signifies to nod with the head, or to nod assent. Cicero uses it for nodding to its fall, or being ruinous; also for hesitating or doubting in an opinion.

Nux. See *Nut*.—*Semen tectum epidermide effeo.* Delin. Pl.

O

OB in composition is put for *obverse*: as

OBCONICUM Nectarium. An inversely conical Nectary, such as we find in *Narcissus minor*.

OBCORDATUM petalum. An Obcordate or inversely heart-shaped petal: having the apex downwards. As in the class *Monadelphica*.—*Obcordatum legumen*; an inversely

O B

versely heart-shaped legume: as in *Polygala*.—*Obcordata silicula*; an inversely heart-shaped silicle: as in *Thlaspi Bursa Pastoris*, or Shepherd's Purse.

OBLIQUUM folium. An oblique leaf. *Basifœlum, apice horizontem spectans.* Having the base directed towards the sky, and the apex or point towards the horizon. This sense of the word *oblique* respects the position of a leaf; and is exemplified in *Protea* and *Fritillaria*. But it is also used in another sense, which respects the shape of a leaf, when the surface is placed obliquely to the petiole, as in *Begonia*.

Obliquus caulis. An Oblique stem. *A perpendiculari horizontalive linea discedens.* Neither perpendicular nor horizontal. Respecting the general position of the stem with regard to the earth; or having a lateral direction without being bent.

OBLONGUM folium. An Oblong leaf.—*Cujus diameter longitudinalis aliquoties superat transversalem, & utraque extremitas segmento*

segmento circuli angustior.—Having its longitudinal diameter several times exceeding the transverse one; rounded at both ends, but the curvature of each less than the segment of a circle.—Applied also to the spike and capsule.

Oblongiusculus. Rather or somewhat oblong.

Oblongo-ovatum folium. An Oblong-ovate leaf. Between both, but inclining most to the latter.

OBOVATUM folium. An Obovate or inversely ovate leaf. Having the narrow end downwards; or next the petiole, branch or stem.

OBSOLETUS. Worn out, scarcely distinguishable, very obscure. *Obsolete lobatum, serratum, &c. Si non exacte lobatum, serratum, &c. est*. Obsoletely lobed or ferrate: applied to leaves which are not quite regularly so: or in which the lobes or ferratures are not very distinguishable: or seem as if almost gone or worn out.

OBTUSUM

OBTUSUM *folium*. An obtuse or blunt leaf. Ending bluntly, but within the segment of a circle.—Applied to the perianth, in *Convolvulus* and *Melia* :—to the capsule, in *Rhinanthus*.

Obtusiusculus. Rather or somewhat obtuse or blunt—bluntish.

OBVERSUM *folium*, f. *verticale*. An obverse or vertical leaf. *Cujus basis angustior, ita ut basis concipiatur ubi nunc apex*. Philos. Bot. p. 220.—Having the base narrower than the top, so that they seem to have changed places. See *Obcordatum* and *Obovatum*.

OBVOLUTA *foliatio*, f. *vernatio*. *Obvoluta folia*. Obvolute foliation, vernation, or leaves. *Quum margines alterni comprehendunt oppositi folii marginem rectum*.—When (as the leaves lie in the bud) the margins alternately embrace the straight margin of the opposite leaf.

OCTANDRIA (*οκτω* and *ανης*, *eight husbands*). The name of the eighth class
in

in the Linnean system; comprehending those plants which have hermaphrodite flowers with eight stamens.

OCTOFIDUS *calyx*. An eight-cleft calyx, as in *Tormentilla*. See *Cleft*.

OLERACEÆ. See *Holeraceæ*.

ONE-CELLED Capsule. *Capsula unilocularis*. As in *Primula*, *Trientalis*, &c.

ONE-FLOWERED Glume. *Gluma uniflora*. Including one flower only.—A one-flowered peduncle. *Pedunculus uniflorus*; sustaining one flower.

ONE-LEAFED Calyx. *Monophyllus*. All of one piece.

ONE-PETALLED Corolla. *Monopetala*. All of one piece.

One-ranked. See *Secundus*.

ONE-SEEDED Berry. *Bacca monosperma* f. *monopyrena*.

ONE-SIDED. *Unilateralis*. Applied to a raceme

raceme which has all the flowers inserted on one side.

ONE-VALVED. *Univalvis*. Applied to the *Glume* in some Grasses—to a Spathe opening on one-side—to a Pericarp which has the outer shell undivided.

OPACUM *folium*. An opaque leaf. Dark-coloured; not reflecting light: in opposition to *Nitidum*, or *Lucidum*.

OPERCULUM (*operio*, to cover). A lid or cover to a capsule: as in some *Mosses*, and *Hyoscyamus*.—Hence such a capsule is said to be *Operculata*, Operculate, Opercled, or covered with a lid.—Some use *Lidded*, which I cannot approve.

OPPOSITA *folia*. Opposite leaves. Growing in pairs, each pair decussated, or crossing that above and below it.—*Oppositi rami, pedunculi*. Opposite branches and peduncles.—Contrasted with *Alternate*.

OPPOSITIFOLIUS *pedunculus*. A peduncle placed opposite to the leaf. This term is applied also to Stipules.

Oppositè-pinnatum. Oppositely-pinnate. See *Pinnatum*.

ORBICULATUM *folium.* An orbicular, or circular leaf.—*Cujus diameter longitudinalis & transversalis æquales, periphæria circinata.* Having the periphery of a circle, or the longitudinal and transverse diameters equal.—Applied to a seed which is flat, with a round margin; as in *Lens*—also to a globular spike.

ORCHIDEÆ. The name of the fourth order in Linneus's Fragments; and of the seventh in his *Ordines Naturales*; containing *Orchis* and other genera allied to it.

ORDO, an Order. A subdivision of a Class; or the second branch in a System. This subdivision is usually arbitrary; and is adopted principally, that too many genera may not occur at once to be distinguished.—In Linneus's system, the Orders of the first thirteen Classes are taken from the number of pistils in the flower. In the fourteenth and fifteenth, from the pericarp.

carp. In the sixteenth, seventeenth, eighteenth, twentieth, twenty-first, and twenty-second, from the number, &c. of stamens. In the nineteenth, from the disposition and character of the florets.

ORGYA. A Fathom. See *Measures*.

Os. See *Mouth*.

OVALE *folium*. An Oval leaf. *Cujus diameter longitudinalis superat transversalem, superiore & inferiore extremitate angustiore.* Philos. Bot.—*Ex orbiculato oblongum, utraque extremitate rotundata æquali.* Delin. Pl.—Having the longitudinal diameter longer than the transverse one, and the curvature the same at both ends. In *Philos. Botan.* the Elliptic leaf is made synonymous with this; but in *Delin. Pl.* they are distinguished.—In truth, an *Oval* leaf has nearly the same proportion with the section of a hen's egg; although it has not the difference of curvature at the two extremities which that and the *Ovate* leaf have. Whereas an *Elliptic* leaf, as Botanists understand it, is much longer

in proportion to its breadth, or more eccentric than the *Oval*.

OVARIUM (from *Ovum*, an Egg). The Ovary or germ; the embryo or rudiment of the fruit. See *Germen*.

OVATUM *folium*. An Ovate or Egg-shaped leaf.—*Cujus diameter longitudinalis superat transversalem, basi segmento circuli circumscripta, apice vero eodem angustiore*. The longitudinal diameter exceeding the transverse one; the base a segment of a circle; but narrower (or having a greater degree of curvature) at top.—The shape of this leaf is that of the longitudinal section of an egg. *Egged* sounds unpleasant to my ears.—It is frequently confounded, by careless writers, with the *Oval* leaf: which see.

Ovato-lanceolatum folium. An ovate-lanceolate leaf. Between these two forms, but inclining to the latter.

Ovato-oblongum folium—semen. An ovate-oblong leaf, or seed. Ovate lengthened out.

Ovato-

Ovato-subulata capsula. An ovate-subulate capsule. Between ovate and awl-shaped, but most tending to the latter. As in *Aconitum*.

P

PAGINA *superior* — *inferior* folii. The upper and lower surface of a leaf. Otherwise called *supinus* and *pronus discus*.

PAIR. *Jugum.* Applied to the leaflets in pinnate leaves; which are said to be *bi-juga*, *trijuga*, &c. from having two, three, &c. pairs of leaflets.—Two-paired, three-paired, &c.

PALATUM. The Palate. *Gibbositas prominens in fauce corollæ.* Philos. Bot.—*Processus labii inferioris superiora versus quo rictus occluditur.* Delin. Pl.—A prominency in the throat of a corolla, in Labiate flowers—or, a process of the lower lip, extending towards the upper part, by which the gape or opening is closed.

PALEA. A Chaff. *Lamella receptaculo innata, flosculos distinguens.* A thin membrane, springing from the receptacle, and separating the florets, in some aggregate flowers. Hence such a receptacle is called

Paleaceum. Paleaceous or Chaffy. As in *Dipsacus, Scabiosa, &c.* See *Chaffy*.

Paleaceus Pappus. A Chaffy crown or down to some seeds; as in *Bidens, Silphium, Tagetes, Coreopsis, &c.*

PALMÆ. The sixth family; and the first of the nine great tribes, nations, or casts, into which Linneus has divided all vegetables. They are placed in the Appendix to the Artificial System, and take the lead in the Natural Orders, though Linneus had placed them only in the second place, in his *Fragments of a Natural Method*.

Palmaris mensura. The measure of a palm or hand. See *Measures*.

PALMATA radix. A Palmate root. Consisting of several oblong tubers or knobs, spreading

P A

spreading out like the fingers. As in some sorts of *Orchis*.

Palmatum folium. A Palmate or hand-shaped leaf.—*Longitudinaliter in partes plures subæquales divisum versus basin, quæ tamen cohærent in unum.* Philof. Bot.—*Divisum ultra dimidium in lobos subæquales.* Delin. Pl.—Divided beyond the middle into several lobes that are nearly equal: as in *Passiflora cærulea*. It resembles the hand with the fingers spread; and is one of the simple leaves: whereas the *Digitate* leaf resembles the fingers spread, without the hand; and, having all the leaflets separate, is one of the compound leaves.

PANDURÆFORME (Paudura, a musical instrument of the guitar kind, in Merfennus) *folium.* A guitar-shaped leaf. (Viol-shaped, *Ray hist.* 174.) The French call it *en forme de violon*.—*Oblongum, inferne latius, lateribus, coarctatum.* Philof. Bot. Oblong, broader below, contracted on the sides. In *Delin. Pl.* the explanation is differently worded.—*Oblongum, lateribus*

inferne coarctatum. Oblong, contracted below at the sides. The former appears to me to be right.—It is exemplified in *Rumex pulcher*, and *Convolvulus panduratus*.

PANICULA (Dimin. from *panica*, πανικη *coma*; or rather from *panus*, the woof about the quill in the shuttle). Panicle.—*Fructificatio sparsa in pedunculis diverse subdivisis*. A fructification, or species of inflorescence, in which the flowers or fruits are scattered on peduncles variously subdivided. As in Oats and some of the Grasses.

Panicula congesta. A heaped panicle. Having great abundance of flowers.

Panicula densa. A dense or close panicle. A higher degree of the preceding. Or rather, having the flowers close as well as abundant.

Panicula spicata. Approaching in form to a spike: as in several of the Grasses, which are commonly called Spiked Grasses.

Panicula

P A

Panicula contracta. A greater degree of the foregoing.

Panicula coarctata. A squeezed panicle. Having the pedicels extremely near to each other.

Panicula patens. A spreading panicle. Having the pedicels spreading out so as to form an acute angle with the stalk.

Panicula diffusa. A diffused panicle. Having the pedicels spreading out more and irregularly.

Panicula divaricata. A divaricating panicle. —Spreading out still more, at an obtuse angle with the stalk.

PANICULATUS *Caulis.* A Panicked stem. Having branches variously subdivided.

Paniculata Gramina. Panicked Grasses. Having their fructifications in a panicle.

PAPILIONACEA (*Papilio, a Butterfly*). A Papilionaceous or Butterfly-shaped corolla.—Irregular, and (usually) four-petalled.

talled. The lower petal is shaped like a boat, and is called *carina* or the keel: the upper petal which spreads and rises upwards, is called *vexillum*, standard or banner: the two side ones stand singly, being separated by the keel, and are called *alæ*, the wings.—The keel is sometimes split, and then this corolla is properly five-petalled. These flowers form a natural class, called *Papilionaceæ*; and are to be found in the fifty-fifth order of Linneus's Fragments, and in the thirty-second of his Natural Orders. They are chiefly comprehended within the order *Decandria* of the class *Diadelphia*, in the Artificial System.—This is one of Tournefort's classes; and is the same with the *Leguminosæ* of Ray and other authors.—The Pea being the most obvious of these, some call them *Pea-blossomed* flowers.

PAPILLOSUM (*Papilla, a nipple*) *folium*.
Quod tegitur punctis vesicularibus. Philos.
 Bot. This explanation is, in *Delin. Pl.*
 more properly referred to *papulosum*; and
 there the *Papillose* leaf is defined—*tectum*
punctis

P A

punctis carnosis; having the surface covered with fleshy dots or points; and is made synonymous with *verrucosum*, warted. If so, the term might be spared.

PAPPUS. (Anciently put for *senex*, an old man, whence it was applied to the down on the seed of thistles, &c. being like the gray hairs of old age.) Commonly translated Down: but hence arises a confusion between this and the *lanugo* or *tomentum* on the surface of leaves, &c. which we usually call *down*. Pliny however will justify us in some degree: for speaking of the *Caëtus* (l. 21, c. 16) he says—*Semen ei lanuginis, quam pappum vocant*. Some endeavour to get rid of this difficulty by translating Pappus, *the Feather*, but I think not successfully; for we cannot say a *hairy feather* and a *feathered feather*.—The French name is *Aigrette*. The Ladies have adopted that term: why may not we? Or if we call it *Seed-down*, all confusion will be avoided.

Linneus explains it to be — *Corona*
(*seminis*) *pennacea pilosave volitans*, A
feathery

feathery or hairy flying crown to the seed.—The first he calls *Pappus plumosus*; and indeed it resembles a feather in its structure:—the second, *Capillaris pilosus* or *simplex*; having the hairs undivided. See *Capillary*.—This crown is either placed immediately on the seed, and is then said to be *sessilis* or sessile; or else there is a thread interposed between it and the seed, which Linneus calls *Stipes*, and then it is said to be *stipitatus*, stipitate or stiped.—This *Down* or *Egret* is one of Nature's most obvious means of dispersing seeds to a considerable distance.

PAPULOSUM folium. (*Papula*, a pimple.)

A pimply, bladdery or blistered leaf.—

Tectum punctis vesicularibus. Covered with little blisters.

PARABOLICUM folium. A Parabolic leaf.

Cujus diameter longitudinalis superat transversalem, & a basi sursum angustatur in semiovatum. Philos. Bot. Having the longitudinal diameter exceeding the transverse one, and narrowing from the base upwards

P A

upwards into a half ovate.—In *Delin. Pl.* it is not so fully expressed—*versus apicem sensim angustius rotundatum*. Rounded gradually towards the top into a narrower form.

PARASITICUS *caulis. Parasitica planta.*

A parasitical stem or plant. *Alteri plantæ nec terræ innatus*. Growing on some other plant, not on the ground.—As *Epidendrum, Tillandsia*.

PARTES *primariæ*. The primary parts of a Vegetable are—1. The *Root*, descending, imbibing fluid, nourishing. 2. The *Herb*, ascending, breathing air, moving. 3. The *Fruetification*, expanding, inhaling ether, generating.

PARTIALIS *umbella*. A partial Umbel: otherwise called *Umbellula*. A smaller umbel, proceeding from the general or universal umbel.—*Umbellula quæ prodiit ex universali*.—The involucre at the foot of this is called the Partial involucre. *Involucrum partiale*.—*Pedunculus partialis*, a Partial peduncle, is a subdivision of
a common

a common peduncle. See *Umbella* and *Pedunculus*.

PARTITION. *Dissepimentum*. A wall separating a pericarp internally into cells.—This is either *Parallel*: that is, approaching in breadth and its transverse diameter to the valves: as in *Lunaria* and *Draba*. Or, *Contrary*; that is, narrower, than the valves: or, as it is expressed more fully in *Delin. Pl.*—narrower, when the valves by being squeezed or contracted become concave. *Angustius ubi valvulae coarctatae evadunt concavae*.—This is exemplified in *Biscutella* and *Thlaspi*.—Linneus borrowed these terms from Tournefort; and says that they are to be understood cum grano salis.—I should have conceived a parallel partition in a siliqua or pod to have been in the direction of the valves—a contrary or transverse one, at right angles with the valves.

PARTITUM folium. A Parted leaf. Simple, but divided almost down to the base.—According to the number of divisions it is called—*Bipartitum*, *Tripartitum*, &c. Bipartite

partite or two-parted; Tripartite or three-parted, &c.—It is applied in the same sense to the Perianth and Corolla.

PATENS folium. A Spreading leaf. *Quod ad angulum acutum cauli insidet.* Forming an acute angle with the stem or branch on which it is placed; between erect and horizontal. Applied also to the Stipule and the Petiole.

Patentes Rami. Spreading branches. Making an acute angle with the stem.

Patentissima folia f. *petala.* Leaves or petals spreading very much: making almost a right angle with the stem or peduncle.

PATULUS (dimin. of *Patens*) *calyx*; as in *Sinapis*, and *Ranunculus acris* and *repens*.—*Pedunculus*; bearing the flowers loose or dispersed; opposed to *coarctatus*, squeezed or contracted.—I do not know that there is any difference in sense between *Patens* and *Patulus*.

PECTINATUM folium. A Pectinate leaf.

A fort

A sort of pinnate leaf, in which the leaflets are toothed like a comb: as in *Artemisia pectinata*.

PEDATUM folium (Pes, a foot,). A Pedate leaf. *Cum petiolus bifidus latere tantum interiore adnectit foliola plura.* When a bifid petiole connects several leaflets on the inside only. This is a species of Compound leaf, and bears some resemblance to a bird's foot. It is exemplified in *Passiflora*, *Arum* and *Helleborus fœtidus*. It is applied also to the Raceme.

PEDATIFIDUM folium. A pedatifid leaf. This is to pedate, what pinnatifid is to pinnate; the parts of the leaf not being separate; but connected, as in the feet of water fowl. Exemplified in *Arum muscivorum*.

PEDICELLUS. A Pedicel or Pedicle.—In *Philos. Botan.* it is interpreted—*pedunculus partialis*, a partial peduncle. But in *Delin. Pl.* a Partial peduncle is a subdivision of a Common peduncle, supporting a few flowers.—The genuine notion of

P E

of a *Pedice* is, that it supports one flower only where there are several on a peduncle; or, it is the ultimate subdivision of a common peduncle, immediately connected with the flower itself.

PEDUNCULUS (dimin. from *Pedo*, *pedare*, the same with *fulcire*, or prop or support. I am at a loss to conceive how Dr. Berkenhout came to derive it from the noun *Pedo*, (play-footed). A Peduncle. By older writers called the *Foot-stalk*; by several moderns the *Fruit-stalk*. To the first of these I object, because we have then the same term for the support of the fructification and of the leaf: to the second, because, the peduncle being the support of the flowers as well as the fruit, we are reduced to the absurdity of saying a many-flowered Fruit-stalk. To both I object, because *Peduncle* is generally received, and is intelligible in every nation where Botany is studied.

The peduncle is the fulcre of the fructification, or a partial stem supporting that only. The explanation in *Philos. Bot.* is

T

thus

thus expressed—*truncus partialis elevans fructificationem, nec folia*.—In *Delin. Pl.* thus—*fulcrum sustinens fructificationem*.—In *Regn. Veget.* it is said to be *ramus caulis floriferus*; a flower-bearing branch from the stem. The last is the least accurate of the three; and wants the exclusion of the leaves, as in the first.

Ray and other old writers use the classical term *Pediculus* for the foot-stalk of a leaf, flower, or fruit. Linneus probably changed it for *Pedunculus*, because the former signified a sort of insect, as well as the little stalk that supports a fruit.

With respect to its *Place*, a peduncle may be

1. *Radicalis*. Radical, or proceeding immediately from the root: as in the *Primrose*.
2. *Caulinus*. Cauline, or proceeding from the stem.
3. *Rameus*. Rameous, or proceeding from a branch. These may be called in
English

English—a root-peduncle—a stem-peduncle—a branch-peduncle.

4. *Petiolaris*. Petiolar, or proceeding from the petiole.
5. *Cirrhiferus*. Cirrhiferous, or tendril-bearing.
6. *Terminalis*. Terminating or proceeding from the top of the stem.
7. *Axillaris*. Axillary, or proceeding from the angle made by the leaf and stem, or the branch and stem.
8. *Oppositifolius*. Opposite to a leaf.
9. *Lateriflorus*. Having the flower on the side of it.
10. *Interfoliaceus*. Among the leaves—I rather think that this is a mistake for *Intrafoliaceus*, within the leaf.
11. *Extrafoliaceus*. Without or on the outside of the leaf.
12. *Suprafoliaceus*. Inserted into the stem higher than the leaf or its petiole.

P E

With respect to their *Situation*, peduncles may be

1. *Opposite* to each other; or, 2. *Alternate*.
3. *Sparsi*, scattered; without any regular order.
4. *Verticillati*, in whorls.

With respect to their *Number*, they may be

1. *Solitarii*. Solitary or single.
2. *Geminati*. Double; two together, or in pairs.

In an Umbellule there are several equal peduncles diverging from the same point or centre.

According to the number of flowers which a peduncle bears it is called *uniflorus*, *biflorus*, *triflorus*, &c. and *multiflorus*.—One, two, three-flowered, and many-flowered.

With

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With respect to its *Direction*, a peduncle may be,

1. *Appressus*. Pressed close to the stem.
2. *Erectus*. Upright.
3. *Patens*. Spreading.
4. *Cernuus*. Drooping. Pointing to the ground.
5. *Resupinatus*. Upside down.
6. *Declinatus*. Bowed or curved downwards.
7. *Nutans*. Nodding. Curved downwards more than in n. 6. but less than in n. 4.
8. *Adscendens*. Rising gradually.
9. *Flaccidus*. Weak, so as to bend with the weight of the flower.
10. *Pendulus*. Loose, so as to tend downwards with the leaf.
11. *Strictus*. Stiff and straight.
12. *Flexuosus*. Bending this way and that.
13. *Retrofractus*. Bent backwards, as if broken.

P E

With respect to its *Measure*, a peduncle is,

1. *Brevis*—*brevissimus*. Short, very short.
2. *Longus*—*longissimus*. Long, very long.

With respect to its *Structure*, a peduncle is,

1. *Teres*. Round, cylindric, or rather columnar.
2. *Triquetus*. Three-sided.
3. *Tetragonus*. Four-cornered.
4. *Filiformis*. Like a thread. Of the same thickness in all its parts.
5. *Attenuatus*. Tapering gradually towards the top.
6. *Incrassatus*. Growing gradually thicker towards the top.
7. *Clavatus*. Club-shaped. Thick at the end.
8. *Nudus*. Naked.
9. *Squamosus*. Scaly.
10. *Foliatus*.

P E

10. *Foliatus*. Leafy.

11. *Bracteatus*. Furnished with bractes.

12. *Geniculatus*. Kneed. Bent at the joints.

13. *Articulatus*. Jointed.

Peduncularis. Growing from a peduncle : as some tendrils do.

Pedunculatus flos—verticillus. A peduncled flower or whorl : in opposition to one that is close to the stem—*sessilis*.

PELTA. A flat fructification on some Lichens, resembling a round shield ; whence its name.

PELTATUM *folium*. A Peltate or Target-shaped leaf. Having the petiole inserted into the disk of the leaf, instead of the edge or base, as is most usual. As in *Nymphæa*, *Hernandia*, *Colocasia*, *Hydrocotyle*, *Tropæolum*, *Geranium peltatum*.—Applied also to a stigma, when it is round and flat, like a *pelta*.

PENICILLIFORMIS *appendix*. An appendix

P E

to the keel of the corolla in some sorts of *Polygala*; in shape of a Painter's pencil.

Penicilliforme stigma. A pencil-shaped stigma: as in *Milium*.

PENNATUM folium. Ray. A feathered leaf. The same with *Pinnatum*, which see.

PENTACocca capsula. A pentacoccous or five-grained capsule. Swelling out in five protuberances; or having five united cells, with one seed in each.

PENTAGONUS caulis. A pentagonal or five-cornered stem. It is a species of Linneus's Ancipital stem, and he seems to distinguish it from *Quinquangularis*.—He describes the capsule of *Euonymus* as being —*Pentagona, quinquangularis*.

PENTAGYNIA. The name of one of the Orders in the fifth, tenth, eleventh, twelfth, and thirteenth classes in the Linnean System; containing those plants which have five pistils in a hermaphrodite flower.

PENTANDRIA. The name of the fifth class in Linneus's system; comprehending those plants

P E

plants which have hermaphrodite flowers with five stamens.

PENTAPETALA *Corolla*. A pentapetalous or five-petalled corolla; or a corolla of five petals: as in the *Umbellatæ*, &c.

PENTAPHYLLUS *Calyx*. A pentaphyllous or five-leaved calyx, or rather perianth: as in *Cistus*, *Adonis*, *Cerbera*.

PERENNIS *Radix—Caulis*.—A perennial root or stem. Continuing more than two years.

PERFECTUS flos. A perfect flower. Having both stamen and pistil; or at least anther and stigma: the same therefore with *Hermaphrodite*. Delin Pl.—In Philos. Botan. it is synonymous with *Petalodes* of Tournefort.—But the having a corolla only is by no means sufficient to constitute perfection in a flower, according to Linneus's idea: neither does the want of it argue imperfection.

PERFOLIATUM *folium*. A Perfoliate or perforated leaf. *Si basis folii undique cingat transversim caulem*. Philos. Bot.—*Basi trans-*

transversum cingente (nec antice debiscente) caulem. Having the base of the leaf entirely surrounding the stem transversely (without any opening in front).—The latter clause of this explanation added in *Delin. Pl.* is not absolutely necessary to discriminate this from the stem-clasping leaf (*Amplexicaule*); if the terms of the two explanations in *Philos. Bot.* be carefully attended to. The base of that is said to surround the *sides* of the stem; whereas in this, the base encircles it quite round; so that it seems as if the stem had been driven through the middle of the leaf. The Perfoliate leaf is well exemplified in *Bupleurum rotundifolium*.

After all, *Folium perfoliatum* appears to me to be an improper term. I should rather have said *Caulis perfoliatus*; a perfoliate stem.

PERFORATÆ. The name of the sixtieth order in Linneus's Fragments of a Natural Method. So called because the plants contained in it have the leaves perforated with small holes.

PERFO-

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PERFORATUM *folium*. A Perforated leaf. Full of small holes, very apparent when held up to the light. As in *Hypericum*.

If there be any difference of meaning in the three terms *Perforatum*, *Pertusum*, *Punctatum*; the first may be rendered *Perforated*; the second *Punched*; and the third *Dotted*. In *Delin. Pl.* they are set down as synonymous, and are explained to be—*adsperfa punctis excavatis*: that is, having hollow dots scattered over the surface. In *Philos Bot.* we find only the term *Punctatum*, explained in the same manner. There also (p. 211) mention is made of leaves that are dotted underneath; as in *Anagallis* and *Plantago maritima*.

The term *Perforatum* is applied also to a Stigma, having a hole bored through it.

PERIANTHIUM (*περι* about, and *ανθος* a flower). The Perianth, or calyx of a flower when contiguous to the other parts of fructification. *Calyx fructificationi contiguus*.—In *Regn. Veget.* it is—*corollæ approximatum*: but it frequently happens that

that a flower has a perianth with any corolla.—The Perianth is often, but improperly, called the calyx exclusively; for this latter term has a more extensive signification. See *Calyx*.

Perianth of the fructification, includes the stamens and germ.

Perianth of the flower, contains the stamens without the germ.

Perianth of the fruit, contains the germ without the stamens.

For the difference between Perianth and Bractæ, see *Bractea*.

1. *Perianthium Caducum*. A caducous perianth. Falling before the flower opens.—*Deciduum*, deciduous. Falling after the flower opens.—*Persistens*, permanent. Continuing after the flower is withered.

2. *Proprium*, Proper. Belonging to one flower.—*Commune*, Common. Belonging to several.

3. *Mono-*

P E

3. *Monophyllum*, &c. *Polyphyllum*. One-leaved, &c. Many-leaved.
4. *Bifidum*, &c. Two-cleft, Three-cleft, &c.—*Bipartitum*, &c. Two-parted, &c.—*Integrum*, Entire.
5. *Tubulosum*.—*Patens*.—*Reflexum*.—*Inflatum*.—Tubular. Spreading. Reflex. Inflated, hollow, or puffed up like a bladder.
6. *Abbreviatum*.—*Longum*.—*Mediocre*.—Abbreviated; or shorter than the tube of the corolla.—Long; that is, longer than the tube. Middling; or about the same length.
7. *Obtusum*. Blunt.—*Acutum*, sharp.
8. *Spinosum*. Thorny. — *Aculeatum*. Prickly.
9. *Æquale*. Equal. Having all the parts corresponding in size and proportion. — *Inequale*, Unequal.
10. *Labiatum*, Labiate, or lip-shaped.
11. *Superum*, Superior. Above the germ.—*Inferum*, Inferior. Below the germ.

12. *Imbri-*

12. *Imbricatum*, Imbricate.—*Squarrosunt*. Squarrose, or having a ragged appearance, from the irregular disposition of the scales.—*Calyculatum*. Calyceled. Having a smaller calyx or perianth at the base of the larger. *Scariosum* Scariose. Tough, thin, and semitransparent.—*Turbinatum*. Turbinate, top-shaped: inversely conical: shaped like a boy's top or a pear.

PERICARPIUM (*περι*, and *καρπος* fruit or seed). A Pericarp, Seed-vessel or Seed-case. *Viscus gravidum seminibus, quæ maturâ dimittit*.—*Vasculum semina producens dimittensque*.—*Ovarium fecundatum*. Philof. Bot. 52, 56, 92.—*Germen defloratum seminiferum*. Regn. Veg.—A viscus big with seeds, or a vessel producing seeds, which it lets drop when they are ripe.—Or it may be considered as the ovary or germ fecundated, or arrived to a state of maturity, after the flower is past; containing ripe seeds analogous to fruitful eggs.

The most remarkable pericarps are the
Capsule

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Capsule — *Siliqua* — *Legume* — *Follicle* —
Drupe — *Pome* — *Berry* — *Strobile*.

PERICHÆTIUM (*περι*, and *χαίτη juba*). *Involucrum setosum, quod inter foliola basin cingit*.—A bristly involucre, surrounding the base, among the leaflets: in Mosses.

PERMANENT. *Persistens*.—Applied to leaves that remain on the plant till the fruit is ripe or after the summer is over—To stipules continuing after the leaves drop off; as in the class *Diadelphia*, and the order *Polygynia* of class *Icosandria*.—To calyxes, abiding after the corolla is withered; as in the class *Didynamia*.

PERSONATA (*Persōna* a mask) *corolla*.
 A personate or masked corolla. *Ringens, sed inter labia palato clausa*. Ringent, but closed between the lips by the palate.
 —But surely ringent or gaping with the lips closed, is a contradiction in terms. It would better to define it, a species of labiate corolla which has the lips closed.
 See *Labiatus*.

Tournefort,

Tournefort, from whom Linneus adopted these terms, is clear and precise in his distinction. A *Labiate* flower, according to him, is drawn out at bottom into a tube, and is widened out at top either into one or two lips. The pistil becomes a fruit of four seeds ripening in the calyx as in a capsule: as in *Salvia*, *Horminum*, *Marrubium*, *Chamædrys*.—A *Personate* flower differs from this in having the pistil becoming a capsule entirely distinct from the calyx. It has something of the same appearance as the labiate flower; but does not ill represent a mask, or the snout of some animals. This he exemplifies in *Linaria*, *Antirrhinum*, *Pedicularis*, *Melampyrum*.—There are some irregular monopetalous flowers which Linneus includes under his *Ritgentes*, that are neither *Labiati* nor *Personati* of Tournefort: as *Digitalis* and *Scrophularia*.

PERTUSUM. Punched. Applied to a leaf which has hollow dots all over the surface. See *Perforatum*.

PES and *Pedalis mensura*. The measure of a foot. See *Measures*.

PETALUM (*πέταλον*, from *πέλω*, to expand).

A Petal. The Greek word signifies a leaf; but it has been appropriated by Columna, and from him by other modern authors, the *flower-leaf*.—*Tegmen floris corollaceum*, Philos. Bot.—The corollaceous integument of the flower.—In flowers of one petal, the corolla and petal are the same. In flowers of several petals, the corolla is the whole, and the petals are the parts. Or, to speak more accurately—in a monopetalous flower, the petal is the corolla, exclusive of the nectary: in a polypetalous flower, it is one of the leaves of which the whole corolla is composed.

In the former, it consists of the *tube* and *limb*. In the latter, of the *claw* and *lamina*.

Petaliforme stigma. A petal-shaped stigma: as in *Iris*.

Petalinum nectarium. A petaline nectary.

Petalodes flos. A petalled flower; or, a flower having petals; in opposition to *Apetalous*, destitute of petals, or having no corolla.

PETIOLUS. A Petiole, Leaf-stalk or Foot-stalk. *Trunci species, adnectens folium. nec fructificationem.* Philos. Bot. *Fulcrum sustinens folium.* Delin. Pl. *Ramus foliiferus, folio proprius.* Regn. Veg.—A partial stem, supporting the leaf, or connecting it with the stem or branch.—It sometimes happens, but very rarely, that the same foot-stalk supports both leaf and fructification, as in *Turnera* and *Hibiscus*.

Petiolulus. A Partial Petiole. Connecting a leaflet with the main petiole, in compound leaves.

Petiolaris cirrus. A petiolar tendril. Proceeding from the petiole of a leaf.—*Pedunculus.* A petiolar peduncle. Inserted into a petiole.—*Gemma.* A petiolar bud. Formed from a petiole.—*Glandula.* A petiolar gland. Growing on the petiole :

as in *Ricinus*, *Iatropa*, *Passiflora*, *Cassia*, *Mimosa*, &c.

Petiolatum folium. A Petiolate or Petioled leaf. Growing on a petiole or footstalk, inserted into it usually at the base. Opposed to sessile.

PILEUS. The cap of a Fungus, expanding horizontally, and covering the fructifications.

PILOSUM folium. A hairy leaf. Having the surface covered with long distinct hairs: as in *Cortusa*, *Juncus pilosus*, *sylvaticus*, *campestris*.—*Pilosum semen.* A hairy seed. As in *Centaurea* and *Tragopogon*.—*Pilosum receptaculum.* A hairy receptacle. Having hairs between the florets.

PILUS. A hair. *Ductus excretorius plantæ fetaceus.* An excretory duct of a plant, in shape of a bristle.—This appears to be an improper explanation of *hair* by *bristle*, inasmuch as a bristle is only a stiff hair.—It is a sort of Pubescence.

PIMPLED or pimply leaf. See *Papulosum*.

PINNA. The large feather of a bird's wing ;
or a fin in fish. Applied in Botany to the
leaflet of some compound leaves.

A subdivision of the pinna is called
Pinnula.

PINNATIFIDUM *folium*. A Pinnatifid leaf.
By the Lichfield Society called Feather-
cleft.—*Transversim divisum laciniis hori-*
zontalibus oblongis.—A species of simple
leaf, divided transversely by oblong hori-
zontal segments or jags—not extending
to the midrib.

PINNATUM *folium*. A Pinnate leaf. *Cum*
petiolus simplex lateribus adnectit foliola
plura.—A species of compound leaf,
wherein a simple petiole has several leaf-
lets fastened to each side of it.

Conjugatum. Conjugate. Having only one
pair of leaflets.

Bijugum. Having two—*trijugum*, having
three—*quadrijugum*, having four pairs of
leaflets.

Pinnatum

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Pinnatum cum impari. Unequally pinnate.
Terminated by a single or odd leaflet.

Pinnatum abruptè. Abruptly pinnate. Not
terminated either by a leaflet or tendril.

Cirrhosum. Cirrhosely pinnate. Terminated
by a tendril.

Pinnatum oppositè. Oppositely pinnate. Hav-
ing the leaflets placed over against each
other in pairs.

Pinnatum alternatim. Alternately pinnate.
Having the leaflets alternate along the
common petiole.

Pinnatum interruptè. Interruptedly pinnate.
Having smaller leaflets interposed between
the principal ones.

Pinnatum articulatè. Jointedly pinnate.
When the common petiole is jointed.

Pinnatum decursivè. Decursively pinnate.
When the leaflets run into one another
along the common petiole.

Pinnulatum folium, f. *pinnulata pinna*. When each pinna is subdivided.

PIPERITÆ (*Piper*, Pepper). The name of the first order in Linneus's Fragments; and of the second, in his Natural Orders.

PISTILLUM. Pistil or Pointal. — *Viscus fructui adhærens, pro pollinis receptione*. Philos. Bot.—*Viscus interior e medulla: Organum genitale femineum*. Regn. Veg. — A viscus or organ adhering to the fruit, for the reception of the pollen.—It is the fourth part of the fructification; and is supposed by Linneus to be a continuation of the *medulla* or pith.—Its appearance is that of a column or set of columns in the centre of the flower: and, when perfect, it consists of three parts—1. *Germen*; the Germ or Ovary. 2. *Stylus*; the Style. 3. *Stigma*.

Pistilliferus flos. A pistilliferous flower. Having a pistil without stamens. Called a Female flower by Linneus.

PITCHER-SHAPED. *Urceolatus*. Swelling or bellying

bellying out like a pitcher. Applied to the calyx, corolla and nectary.

PITH. See *Marrow* and *Medulla*.

PITTED leaf. See *Lacunosum*.

Placenta. See *Receptaculum*.

PLACENTATIO. Placentation. *Est cotyledonum dispositio sub ipsa seminis germinatione.* The disposition of the cotyledons or lobes in the vegetation or germinating of the seed.—Hence vegetables are distributed into—1. *Acotyledones*. 2. *Mono-cotyledones*. 3. *Dicotyledones*. 4. *Poly-cotyledones*.

Plaited. *Plicatus*. Folded like a fan. Distinguished from waved by the folds being angular. Applied to the leaf; as in *Alchemilla*:—to the corolla; as in *Convulvulus*:—to the nectary; as in *Narcissus Tazetta*. It is also a term in *Foliation* and *Placentation*.

PLANTA. A Plant. In common language synonymous with Vegetable: but frequently

quently used in a more restricted sense. Plants are placed Linneus in the last of the seven Families into which he has distributed the whole Vegetable kingdom. Comprehending all that are not *Funguses*, *Algas*, *Mosses*, *Ferns*, *Grasses* or *Palms*. They are, 1. *Herbaceous*. 2. *Shrubs*. 3. *Trees*. Philos. Bot. p. 37.—In Regn. Veg. he has sunk the word *Plantæ*; and has divided them into *Lilia*, *Herbæ*, *Arbores*.

PLANUM folium. A Plane or flat leaf.—*Quod utramque superficiem ubique parallelam gerit.* Having the two surfaces parallel.—In Delin. Pl. it is—*superficie æquali.* Having an even surface: but this explanation is defective.

Plano-convexum Stigma. A plano-convex stigma. Flat on one side, and rising on the other.

Plenus. See *Full*.

PPLICATUS. Plaited. — *Plicatum folium.* *Quum discus folii versus marginem ad angulos adscendit & descendit.*—*Plicata foliatio:*

foliatio: *In plicas varias coarctata.* See *Plaited*.

PLUMOSA or *Plumata Seta.* A plumose or feathered bristle. *Villosa, composita.* Having hairs growing on the sides of the main bristle. Resembling a feather.

PLUMOSUS *Pappus.* Plumose, feathered or compound Down. *Pilis pennatis confans* — f. *villosus compositus.* — A flying crown to some feeds, composed of compound or feathery hairs: as in *Crepis*, *Scorzonera*, *Tragopogon*. Opposed to *Capillary*. See *Pappus*.

PLUMULA. The Plume, or ascending scaly part of the *Corculum* or Heart of the seed.

Pod. See *Siliqua*.

Pointal. See *Pistillum*.

POLLEN. Farina, or prolific powder, like fine meal or flower, contained in the anther of flowers; and which, according to Linneus, being moistened with a liquor peculiar

peculiar to it, and lodged upon the stigma bursts like a bladder, and explodes elastically a substance inperceptible to the naked eye; which he calls *Fovilla*.—*Pulvis floris, humore rumpendus, atomosque elasticos ejaculans*—vel, *appropriato liquore madefactus rumpendus, & substantiam sensibus nudis imperscrutabilem elasticè explodens*.—*Est omne Pollen vesiculare, & continet materiam impalpabilem, quam explodit*. Philos. Bot. p. 53, 56, 90.

Pollen, when exposed to the microscope, is found to put on a great variety of forms in the flowers of different plants. Thus in *Helianthus* it is a prickly ball, like a burr. In *Geranium* it is perforated. In *Symphytum* it is twin or double. In *Malva* it is a toothed wheel. In *Viola* it is angular. In *Narcissus* it is kidney-shaped. In *Borago* it is like a roll of parchment.

POLLEX f. *pollicaris mensura*. See *Measures*.

POLYADELPHIA (*πολυς* many, and *αδελφος* a brother; several brotherhoods.) The name

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name of the eighteenth class in the Linnean system ; comprehending those plants which bear hermaphrodite flowers, with three or more sets of united stamens.

POLYANDRIA (πολυς, and ανηρ *a husband*).

The name of the thirteenth class in the Linnean system comprehending those plants which bear hermaphrodite flowers with many stamens (from twenty to a thousand) growing single on the receptacle. The number of the stamens distinguishes this from the first eleven classes; their situation (on the receptacle) separates it from the twelfth class, *Icosandria* : and their simplicity avoids all confusion with the sixteenth and eighteenth classes—*Monadelphia* and *Polyadelphia*.

POLYCOTYLEDONES *Plantæ*. Plants which have more than two cotyledons or lobes to the seed ; as *Pinus*, *Cupressus*, *Linum*.

POLYGAMA (πολυς and γαμος, *several marriages*) *Planta*. A Polygamous plant is that which has hermaphrodite, and either male or female flowers, or both.

POLY-

POLYGAMIA. The name of the twenty-third class in the Linnean system; comprehending those plants which bear hermaphrodite flowers, accompanied with male or female flowers, or both; not inclosed within the same common calyx, but scattered either on the same plant, or on two, or on three distinct individuals. Whence the three Orders of this class—
 1. *Monæcia.* 2. *Diæcia.* 3. *Triæcia.*

Some modern reformers have entirely discarded this Class, and thus have simplified the Linnean arrangement, and rendered it more easy to beginners; but they have at the same time wholly mutilated it, considered as a sexual system. We may go on reforming till we reduce it to the simplicity of Rivinus's system; when it will acquire great facility, and at the same time become good for nothing.

This term *Polygamia* or Polygamy, as applied to a compound flower, in the orders of the class *Syngenesia*, signifies that several distinct flowers (called *Florets*) are included

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included in one common calyx. These may be all hermaphrodite, as in the first order; or hermaphrodites with female flowers as in the second, third, and fourth.

POLYGONUS *caulis*. A many-angled stem. Having several (more than six) prominent longitudinal angles. *Delin. Pl.*—But in *Philos. Bot.* it is a species of *Anceps*. *Multangularis* is explained in *Delin. Pl.* to be—excavated longitudinally by several hollow angles. According to this explanation, therefore, the former term refers to the angles in *cameo*, the second to those in *intaglio*.—But in *Philos. Bot.* the *Multangular* stem is said to have several prominent angles.

POLYGYNIA (*πολυς*, and *γυνη* a wife). The name of one of the orders, in the fifth, sixth, twelfth and thirteenth classes of the Linnean system; comprehending those plants which have flowers with many pistils.

POLYPETALA *corolla*. A Polypetalous corolla—or, a corolla of many petals.—
Linneus

Linneus uses this term in opposition to a monopetalous corolla; that is, consisting of one petal only. By former writers it was commonly put for a flower of more than six petals; and Linneus uses the terms *monopetala*, *dipetala*, &c.

POLYPHYLLUS. Many-leaved. Applied to the calyx, perianth, involucre, and *cirrus* or tendril; in opposition to *monophyllus*, one-leaved.—Here also Linneus uses *diphyllus*, *triphyllus*, &c.

POLYSPERMA *capsula—bacca*. A many-seeded capsule or berry: containing several seeds.

POLYSTACHYUS *culmus*. A culm bearing several spikes. As in *Scirpus lacustris*, *holoschænus*, and *setaceus*.

POMACEÆ. The name of the thirty-seventh order in Linneus's Fragments; and of the thirty-sixth in his Natural Orders. Comprehending such plants as bear a Pome, or fruit resembling the apple.

POMUM.

POMUM. A Pome. *Pericarpium farctum*
valve, capsulam continens. A pulpy peri-
 carp without valves, containing a capsule.
 —It includes all the moist fruits which
 have the seeds lodged in a core ; as *Apple*,
Pear, *Quince*, &c.

Pouch. See *Silicula*.

PRÆMORSUS. Bitten off. *Præmorfa radix*;
 not tapering, but ending blunt, and thus
 appearing as if it were bitten off short at
 the end, as in *Scabiosa*, *Plantago*, *Va-*
leriana. *Præmorsum folium* ; ending very
 obtusely, with unequal notches.—*Præ-*
morfa corolla : as in *Althæa*.

PRECIÆ. Early ripe. The name of an
 early sort of Grape in Virgil. The fifty-
 first order in Linneus's Fragments ; and
 the twenty-first in his Natural Orders :
 comprehending such plants as flower early
 in the spring.

PRICKLE. *Aculeus.* A sharp process from a
 plant, fixed into the bark only : as in
Rose, *Bramble*, *Gooseberry*, and *Barberry*.

This

This and the Thorn are called *Arma* by Linneus, and are enumerated among the Fulcres.

Prickles are straight—bent in, *incurvi*; or bent back, *recurvi*—When divided, they take the name of *Furcæ*, forks or forked prickles; and are called bifid, trifid, &c. from the number of divisions.

PRICKLY. *Aculeatus*. Armed with prickles. Applied to the stem, stipe, leaf, petiole, and perianth.

PRISMATICUS *calyx*. *Prismaticum stigma*—*pericarpium*. A prismatic or prism-shaped calyx or perianth—stigma—pericarp. *Cum lineare polyedrum sit, lateribus planis*. Linear, or of the same thickness from top to bottom with several flat sides.

PROCUMBENS *caulis*. . A procumbent stem. *Horizontaliter supra terram*. Philos. Bot. *Debilis terræ innitens*. Delin. Pl.—Unable to support itself, and therefore lying upon the ground—but without putting forth roots. See *Repens*.—The procumbent, trailing,

P R

trailing, or prostrate stem, as it is sometimes called, is exemplified in *Convolutus Soldanella*.

PROLIFER *caulis*. A proliferous stem. *Exapicis centro tantum emittens ramos*. Putting forth branches only from the centre of the top: as in *Pinus*.—**Prolifer flos**. A proliferous flower.—*E centro floris alium protrudens*.—*Cum intra florem (sepius plenum) alii flores enascuntur*. Having smaller flowers growing out of the principal one: as in *Childing Daisy*.—**Prolifera umbella**. A proliferous umbel. *Plusquam decomposita*. Every compound umbel is twice divided. In a proliferous umbel, the umbellule is subdivided.

PROMINENS *dissepimentum*. A prominent partition, in a siliqua. Standing out beyond the valves.—*Prominens faux*. A prominent throat or opening in the tube of a corolla: as in *Cyclamen*.

Prominulum dissepimentum. A partition somewhat or but a little prominent.

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PRONUS *discus* f. *inferior pagina folii*. The lower side, or surface, or back of a leaf.

Prop. See *Fulcrum*.

PROPAGO. *Semen Musci decorticatum, detectum* 1750. A peculiar name given by Linneus to what he took for the seeds of Mosses; because he supposed them to differ from other seeds in having a naked corcle or heart, without cotyledons; a discovery which he made in 1750. But they are now known to be the dust of the capsule, which Linneus mistook for the Anther.

PROPRIUM *receptaculum*. A Proper or peculiar receptacle. *Quod partes unius tantum fructificationis respicit*. That which respects the parts of a single fructification: in opposition to a Common receptacle, connecting several florets, as in the Aggregate flowers.—*Proprium Perianthium*—*Involcurum*. A Proper perianth, or involucre: respecting one flower only. As in simple flowers. Aggregate flowers have usually both a calyx *common* to the whole, and a perianth *proper* to each floret.—*Proprius flos*—*Propria corolla*.
A Proper

A Proper flower or corolla. One of the single florets or corollets in aggregate flowers: in opposition to the common or compound flower, consisting of the aggregate of florets, making one whole.

—*Proprium Nectarium*. A proper, peculiar or distinct nectary. Separate from the petals and other parts of the flower.

Prostratus. See *Procumbens*.

Protruded. See *Exsertus*.

PUBES. Pubescence. *Hirsuties omnis in planta*. Delin. Pl.—*vestiens villositate*. All hairiness, or shagginess in a plant; or whatever clothes it with any hairy or vilous substance. Linneus's original word was *Pubescentia*, and he explained it to mean the armour of a plant, by which it is defended from external injuries: thus comprehending Thorns and Prickles under the idea of Pubescence. These however he afterwards separated, and called them with more propriety *Arma*.—The following are the different forms of Pubescence.

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1. *Pili*. Hairs. Excretory ducts, in that form.
2. *Lana*. Wool: or close curled hairs.
3. *Barba*. Beard: or parallel hairs.
4. *Tomentum*. Flocks: or interwoven villous hairs scarcely conspicuous.
5. *Strigæ*. Stiffish flattish hairs.
6. *Setæ*. Bristles. Stiffish roundish hairs.
7. *Hami*. Hooks. Sharp crooked points.
8. *Glochides*. Barbs. Straight toothed points.
9. *Glandulæ*. Glands. Small *papillæ* or teats, or excretory ducts in that form.

Glands seem to be improperly enumerated as a species of pubescence.

PUBESCENS. Pubescent. Covered with one of the foregoing sorts of pubescence. Applied to the stem, leaf, corolla, and style.

PULPOSUM folium. A pulpy leaf, filled with a tenacious substance between the
two

two surfaces.—Linneus did not originally distinguish this from *Carnosum*, which has a firmer pulp.

PUNCHED leaf. See *Perforatum* and *Per-
tufum*.

PUNCTATUM. Dotted leaf. See *Perforatum*.

PUNGENS. Pungent, sharp or prickly.

PUTAMEN. The shell of a nut and other fruits allied to it.—Hence

PUTAMINEÆ. The name of the thirty-first Order in Linneus's Fragments, and of the twenty-fifth in his Natural Orders.

Q

QUADRANGULARIS *caulis*. *Quadrangulare folium*. A Quadrangular stem or leaf. Having four prominent angles.

Q U A

QUADRICAPSULARE *pericarpium*. A Quadricapsular pericap. Having four capsules to a flower: as in *Rhodiola*.

QUADRIDENTATUS *pappus*. A four-toothed Seed-Down. Having four teeth on the edge. As in *Rudbeckia*.

QUADRIFIDUS *calyx*. A four-cleft perianth: as in *Rhinanthus*.—*Quadrifidum folium*. A four-cleft leaf. Cut into four segments with linear sinuses, and straight margins.

QUADRIJUGUM *folium*. A quadrijugous leaf. Pinnate, with four pairs of leaflets.

QUADRILOBUM *folium*. A four-lobed leaf, Divided to the middle into four distant parts, with convex margins.

QUADRILOCULARE *pericarpium*. A four-celled pericarp: as in *Euonymus*.

QUADRIPARTITUM *folium*. A four-parted leaf. Divided into four parts almost to the base.

QUADRI-

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QUADRIVALVE *pericarpium*. A four-valved pericarp: as in *Ludwigia*, *Oenothera*, &c.

QUATERNA *folia*. Four-fold leaves. Growing by fours; or, coming out four together: as in the *Stellatæ*.

QUINA *folia*. Five-fold leaves. Five together in a whorl. As in some of the *Stellatæ*.

QUINATUM *folium*. A sort of Digitate leaf, which has five leaflets on a petiole.

QUINQUANGULARE *folium*. A five-cornered leaf. Having five prominent angles about the disk.—*Quinquangularis caulis*. A five-cornered stem.

QUINQUECAPSULARE *pericarpium*. Having five capsules to a flower: as in *Aquilegia*.

QUINQUEFIDUM *folium*. A quinquefid or five cleft leaf. Cut into five segments, with linear sinuses, and straight margins. Applied to the corolla—and to the perianth, in *Nicotiana*.

QUINQUEJUGUM *folium*. A pinnate leaf, with five pairs of leaflets.

QUINQUELOBUM *folium*. A five-lobed leaf. Divided to the middle into five distant parts, with convex margins.

QUINQUELOCULARE *pericarpium*. A five-celled pericarp: as in *Pyrola*.

QUINQUEPARTITUM *folium*. A five-parted leaf. Divided into five parts almost to the base.—Applied to the perianth, in *Lithospermum*.

QUINQUEVALVE *pericarpium*. A pericarp of five valves: as in *Hottonia*,

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RACEMUS (from ραξ, ραγος, *acinus racemi*). A Raceme.—Anciently signifying a bunch of grapes, or other berries; in the Linnean language it is a species of inflorescence, consisting of a peduncle with
short

R A

short lateral branches. *Pedunculo ramis lateralibus instructo.* As in *Vitis* or Vine, *Ribes* or Currant, &c.

A Raceme may be—

1. Simple, or Compound.
2. One-sided. *Unilateralis.* Having all the flowers growing on one side of the common peduncle.—*Secundus.* All bent or directed the same way.—Pedate—Conjugate.
3. Erect.—Loose, *laxus.*—*Dependens*, hanging down.
4. Naked, or leafy.

RACHIS (*Ραχίς*, the back-bone) *spicæ.* The Spine. *Receptaculum filiforme flosculos longitudinaliter annectens in spicam* Delin. Pl.—*Receptaculum spicæ graminis cui flores insculpti.* Regn. Veg.—A filiform receptacle connecting florets longitudinally into a spike: as in *Panicum Crus corvi* and *Crus galli*, *Lolium*, and many other Grasses.—It has the name from some resemblance which it bears to the spine, when

when it is naked or deprived of the florets. Dr. Withering calls it the Spike-stalk.

This term is also sometimes used for the principal rib of a leaf.

RADIATA (*Radius*, a ray) *corolla*. *Radiatus flos*. A Radiate or Rayed corolla or flower.—A kind of compound flower, (in the class *Syngenesia*) consisting of a disk, in which the corollets or florets are tubular and regular; and of a ray, in which the florets are irregular. These are most commonly ligulate; as in *Sun-flower*, *Daisy*, &c.—Sometimes however they also are tubular, but irregular; as in *Centaurea*. And sometimes they are naked, or nearly so: as in *Artemisia*, *Gnaphalium*.

Radiato-Patens. Radiate expanding: or, spreading out like rays. Applied to the stigma.

RADICALIS *pedunculus*. A root-peduncle; scarcely different from scape, but sustaining only one flower. See *Scapus*. *Radicale*

R A

caule folium. A root-leaf. Proceeding immediately from the root.

RADICANS *caulis.* A Rooting stem. *Altis se affigens radiculis lateralibus.*—*Radicans folium.* *Si folium radices agat.* See *Rooting.*

RADICATUM *folium.* A rooted leaf. *Radiculas demittens e substantia ipsius folii.*—*Radicatus scapus;* a rooted scape, as in *Drosera.*

Radicula (dimin. from *Radix*, a root), a Radicle or Fibre. The fibrose part of the root, by which the stock or main body of it is terminated; imbibing nourishment for the support of the vegetable.

RADIUS. A Ray. *Pars exterior corollæ compositæ.*

RADIX (from *Radius*, according to some; from *rado*, as others will have it; but more probably from the Greek *ῥαδιξ*, which however signifies a branch). *Alimentum hauriens, herbamque cum fructificatione producens.* Philof. Bot.—*Organon nutriens*

nutriens plantam. Delin. Pl.—*Descendens, aquosa forbens, nutriens.* Regn. Veg.—
See *Root*.

Ragged. See *Squarrosus*.

RAMENTUM (a *radendo*, q. *rasura*). A small particle of any thing; as gold-dust, saw-dust, or little chips, &c. Applied by Linneus to the small loose scales that are frequently found on the stems of vegetables.

RAMEUM folium. *Rameus pedunculus.* A branch-leaf. A branch-peduncle. Growing on, or proceeding from a branch. In opposition to such as proceed from the root, or axils, or grow on the stem itself.

RAMOSUS caulis. *Ramosa radix.* A branched stem, or root. Having lateral divisions, *Ramosissimus.* Very much branched. *Ramis multis absque ordine gravidus.*

RAMUS. A Branch. *Pars caulis.* A subdivision of the stem.

Ramulus.

Ramulus. A branchlet, little branch, or twig. A subdivision of the branch.

RAY. *Radius.* The outer part or circumference of a compound radiate flower; or radiated discous flower, as it is called by others.

Rayed. See *Radiata*.

RECEPTACULUM (*Recipio*, to receive). A Receptacle.—*Basis qua partes fructificationis connectuntur.* The base by which the other parts of the fructification are connected.—By Boerhaave named *Placenta*; and by Vaillant *Thalamus*.

1. *Proprium.* A proper or peculiar receptacle: appertaining to one fructification only. *Commune.* A Common receptacle: connecting several florets or distinct fructifications, so that if any one of them be removed an irregularity is occasioned.—There are instances of this in the *Umbel*, *Cyme*, *Spadix* and *Rachis*, as well as in the *Compound flowers*.

2. *Recept. Fructificationis.* The Receptacle
of

of the Fructification. Common both to flower and fruit; or embracing the corolla and germ.

Floris. Receptacle of the flower. The base to which the parts of the flower, exclusive of the germ, are fixed.

Fructus. Receptacle of the fruit. The base of the fruit only, remote from the receptacle of the flower.

Seminum. Receptacle of the seeds. The base to which the seeds are fixed: as in *Adonis*.

3. The Receptacle may be, *Nudum*. Naked. Without chaffs, hairs or bristles. *Punctatum*. Dotted.—*Pilosum*. Hairy.—*Setosum*. Bristly.—*Paleaceum*. Chaffy.—*Alveolatum* f. *favosum*. Honey-combed; divided into open cells, within each of which a single seed is lodged.

Planum. Flat.—*Convexum*. Convex.—*Subulatum*. Subulate or awl-shaped.—*Ovatum*. Ovate.—*Globosum*. Globular.—*Conicum*. Conical.

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RECLINATUM folium. A reclined leaf.

Quod deorsum curvatur, ut apex fiat basi inferior; quibusdam etiam Reflexum dicitur. Philos. Bot.—*Deorsum flexum, ut arcus sit basi inferior, apice adscendente.*

Delin. Pl. Bent downwards, so that the point of the leaf is lower than the base. The latter explanation seems very different; if I understand it rightly, as meaning that the bow is lowest at the base, and rises at the point. In Foliation, this term implies, that the leaves are bent downwards towards the petiole: as in *Podophyllum, Aconitum, Anemone, Adoxa*.

Reclinatus caulis. A reclined stem. Bowed towards the earth: as in *Ficus*.

RECTUS caulis. A straight stem. See *Straight*.

RECURVATUM folium. A recurved leaf.

Deorsum flexum, ut arcus superiora spectet.

Delin. Pl.—Bent, or rather bowed or curved downwards, so that the bow or convexity is upwards. This term does not occur in *Philos. Bot.*—Berkenhout explains

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explains it, but I know not on what authority—"bent downward in a greater degree than *reclinatum*, but not so much as *revolutum*."

When applied to a Prickle, it is said only to be bent outwards; in opposition to *incurvus*, bent in.—In the same sense it is applied to the Awn, Petiole, Calyx, and Corolla.

REFLEXUS. Reflex. Bent back. Rami reflexi. *Perpendiculariter dependentes*. Delin. Pl.—Hanging down perpendicularly.—*Reflexum folium*. A reflex leaf: as in *Euphorbia portlandica*.—*Reflexum perianthium*. A reflex perianth: as in *Asclepias* and *Leontodon*.—*Reflexus flos*. *Reflexa corolla*. *Reflexa petala*. A reflex flower, corolla, or petals: as in *Lilium chalcedonicum*, *Cyclamen*, *Narcissus triandrus*, &c.—Applied also to the stipule and bracte.—See *Retroflexus*.

REFRACTUS. Refracted. As it were broken.—*Refracta corolla*. *Recurvata angulo acuto*. Delin. Pl. Bent back at an acute angle. See *Retrofractus*.

REGU-

REGULARIS corolla. A regular corolla.—
Æqualis figura, magnitudine & proportionem partium. Equal in the figure, size and proportion of the parts: as in *Privet, Lilac, Jasmin, &c.*

REMOTUS. Remote. Distant.—*Remota folia:* opposed to *approximata*.—*Remoti pedunculi* opposed to *conferti*.—*Remoti verticilli* opposed to *contigui*, as in *Galeopsis Ladanum*.

RENIFORME folium. A Reniform or Kidney-shaped leaf.—*Subrotundum, basi excavatum, angulis destitutum.* Philos. Bot.—*Subrotundum, basi exsculptum absque angulis posticis.* Delin. Pl.—Roundish, hollowed out at the base, without angles: as in *Convolvulus Soldanella*, the lower leaves of *Campanula rotundifolia*, *Saxifraga granulata*, *Glecoma hederacea*.—This term is applied also to the anther and Seed.

REPANDUM folium. A Repand leaf.—
Cujus margo angulis, eisque interjectis sinibus, circuli segmento inscriptis terminatur.
 The rim of which is terminated by angles,
 Y having

having sinuses between them inscribed in the segment of a circle.—In *Delin. Pl.* it is differently described *marginē flexuoso, tamen plano*: with a flexuose or waving rim, but flat. Properly speaking, says Dr. Berkenhout, having a serpentine margin, without any angles at all. But this by no means agrees with the first explanation from Linneus's *Philosophia Botanica*.—It is clearly distinct from the *Undulating* or *waving* leaf; for the curvature in that respects the disk; but in this, the edge only.

REPENS radix. A creeping root.—*Longe excurrens hinc inde germinans, f. radículas demittens.*—*Repens caulis: radículas hinc inde exserens procumbendo; ut in Hedera, Bignonia.*

Reptans flagellum. A runner. As in *Strawberry*. See *Creeping* and *Runner*.

RESUPINATA corolla. Cum labium superius terram, inferius cælum spectat. When the upper lip faces the ground, and the lower lip the sky. Or, when that which
is

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is usually the upper lip (in a labiate corolla) becomes the lower; and the contrary: so that the flower is, as it were, turned upside down; or, in vulgar language, topsy-turvy. This is exemplified in *Scrophularia*, *Ocimum*, *Ajuga orientalis*, the European *Violets*, and some species of *Satyrium*.

Resupinatum folium. *Pagina superiore inferiore, & contra inferiore superiore facta.* A leaf is said to be *Resupinate* or turned upside down, when that which is commonly the upper surface becomes the lower; and the contrary.

RETICULATA (dimin. from *rete*, a net) *corolla, petala.* A netted corolla. Netted petals. Having distinct veins crossing like net-work.—Beautifully exemplified in *Geranium striatum*.

RETROFLEXUS. *Retroflex.*—*Rami retroflexi: horsum versus divaricati.* Bending this way and that, in different directions, usually in a distorted manner. Thus it seems to differ from *Reflex*, which is only

simply bent back at an angle. Dr. Berkenhout explains it to be three times bent, or bent in three different directions. But for this I know not that he has any warrant, either from the sense of the term, or the explanation. It does not occur in *Philosophia Botanica*.

RETROFRACTUS. Retrofracted. Applied to the Peduncle.—*Vi quasi ad dependentiam redactus*. Delin. Pl.—Reduced to hang down as it were by force. So that it appears as if it had been broken.—I do not discover any reason why this and the foregoing term should have a different signification from *Reflexus* and *Refractus*.

RETUSUM folium. A Retuse leaf. *Quod terminatur sinu obtuso*. Ending in a blunt sinus: as in *Frankenia pulverulenta*, *Crotalaria retusa*.—Applied also to the seed in *Lycopus*.

REVOLUTUS. Rolled back or downwards. —*Revoluta vernatio* s. *foliatio*. Revolute foliation or leafing. *Quorum margines laterales*

R H

laterales utrinque retrorsum, f. versus paginam inferiorem spirally convolvuntur.

When the sides of the leaves (in the bud) are rolled spirally back, or towards the lower surface.—*Revolutum folium.* A Revolute leaf. *Quod deorsum revolvitur.*—Having the edges rolled back or towards the lower surface: as in *Rosemary*, *Teucrium fruticans*.—*Revolutus cirrus.* A Revolute tendril. *Spira dimidio itinere retorta.* When a spire of the screw, having made half a revolution, turns back in a contrary direction.—*Revoluta corolla.* A revolute corolla: having the petals rolled back, as in *Asparagus*, *Medeola*, *Lilium chalcedonicum*.—*Revoluta valvula.* A Revolute valve. Turned back after it opens: as in the silique of *Cardamine*.—This term is opposed to *Involute* or rolled inwards.

RHŒADES f. RHŒADEÆ (from *Rhæas*, Corn Poppy). The name of the thirtieth order in Linneus's Fragments, and of the twenty-seventh in his Natural Orders; containing vegetables allied to the Poppy.

RHOMBEUM folium. A Rhombed or rhomb-shaped leaf. Having four equal sides, but the angles not right angles: as in *Poplar*.—Linneus has not this term in his *Philosophia Botanica*; but his Deltoid leaf seems scarcely to differ from it.

RHOMBOIDEUM folium. A Rhomboid leaf. Having the opposite sides equal, and the angles not right ones: as in *Chenopodium viride*. This also seems included in the Deltoid leaf of *Philos. Botan.*

RIB. Costa. The continuation of the petiole along the middle of a leaf, and from which the veins take their rise.

Ribbed. Costatum; which see.

RICTUS. The Gape. *Hiatus inter utrumque labium.* The opening between the two lips in a labiate flower.

RIGIDUS. Rigid, stiff, inflexible, impatient of bending: opposed to *laxus*. Applied to the stem, leaves and bristles.—The stem is called *Rigosus* in *Glinus dictamnoides*. Has this term the same meaning with

R I

with the other? But *rigosus* should be derived from *Rigo*, not from *Rigeo*.

RIMOSUS. Rimose or Chinked. Abounding in cracks, clefts, or chinks; as the outer bark of some trees.

RINGENS (from *gives*, *nares*, the nostrils, whence *riētus*) *corolla*. A ringent corolla. *Irregularis in duo labia personata*.—*Mono-petala irregularis, & limbo diviso in duo labia*. Philof. Bot. pl. 52, 135. An irregular one-petalled corolla, the border of which is usually divided into two parts, called the *upper* and *lower lip*. The first has sometimes the name of *Galca* or *Helmet*: the second of *Barba* or *Beard*. The opening between them is named *Riētus* or the *Gape*: the opening of the tube, *Faux*, the *Throat* or *Jaws*: the prominent swelling in the *Faux* is *Palatum*, the *Palate*: the upper part of the tube is *Collum*, the *Neck*. The Ringent corolla is exemplified in the class *Didynamia*.—See *Labiatus*.

RISEING leaf or petiole. See *Ajurgens*.

R O

Roll'd back. Sec Revolutus.

Root. *Radix.* That organ of a vegetable which draws in the nourishment, and produces the herb with the fructification. —It is composed of *Medulla* or Pith, Wood, inner and outer Bark: and consists of the *Caudex*, stock or main body; and the *Radiculæ* or fibres, by which the moisture is immediately imbibed. We commonly regard all that part of a vegetable only which is under ground as the Root; but Linneus comprehends the *ascending caudex*, or what we commonly term the body, trunk or bole, within his idea. According to him, therefore, trees and shrubs are all root, except the leaves and fructification; and consequently if a tree be turned upside down, the descending caudex will produce leaves, and the ascending caudex will put forth fibres.

A Root in *Duration* is,

1. Annual. 2. Biennial. 3. Perennial.

In

R O

In *Form*,

- a. 4. Fibrose. 5. Branching. 6. Fusiform.
7. Præmorse or bitten off.
- b. 8. Creeping. 9. Jointed. 10. Toothed.
- c. 11. Globular. 12. Tuberous. 13. Fascicled or bundled. 14. Palmate.
- d. 15. Bulbous. 16. Granulate. 17. Tunicated. 18. Solid. 19. Scaly.

In *Substance*,

20. A Bulb. 21. A Tuber. 22. A Fibre.
23. A Fibril.

ROOTING stem. *Caulis Radicans*. Bending to the earth and striking root, but not creeping along.—A rooting leaf. *Folium radicans*. Shooting forth roots; as in some aquatic plants: this is sometimes called *Folium radicatum*.

ROOT-LEAF. *Folium radicale*. Proceeding immediately from the root, or growing next the ground: frequently different
from

R O

from the leaves on the stem and branches; as in *Campanula rotundifolia*.—Peduncles sometimes spring from the root, and may be named *Root-peduncles*.

ROOTLET, Radicle, or Fibre. See *Radicula*.

Root-leaf and Rootlet are more proper in English than Radical leaf and Radicle, on account of the analogy.

ROSACEA *corolla*. A Rosaceous or Rose-like corolla. A species of the Polypetalous; consisting of four or more regular petals, inserted into the receptacle by a short, broad claw; as in the wild Rose. This is a term of Tournefort's; and such flowers form his sixth class, entitled *Rosacei*.

ROSTELLUM (dimin. from *Rostrum*, a beak). The Rostel, or descending plane part of the Corcle or heart, in the first vegetation of the seed.—*Pars corculi simplex descendens*.

ROSTRATUS *fructus*. A beaked fruit. Having a process resembling the beak of a bird: as in *Geranium*, *Scandix Pecten*.

ROTACEÆ

R O

ROTACEÆ (*Rota*, a wheel). The name of the fifty-second order in Linneus's Fragments; and of the twentieth in his Natural Orders.

ROTATA corolla. A Wheel-shaped corolla. Monopetalous; spreading flat, without any tube: as in *Borago*, *Veronica*, *Lyfimachia*.—Applied to the nectary in *Narcissus poeticus*.

ROTUNDUM folium. A round leaf. *Quod angulis privatur*. Philos. Bot.—In p. 233, *Rotundatum* is opposed to *angulatum*.—By this term therefore Linneus does not mean a circular, or what we should call a round leaf, in English; but one which has a curve without any breaks for the circumscribing line. *Orbiculatum* is his term for circular or round.

Rotundo-trigonum. Obtusely three-cornered or three-sided with the corners rounded off: as in the germ of *Hyacinthus*.

ROUGH: *Asper*. Made synonymous with *Scaber* by Linneus.—He uses it however in a sense much more general.

Rough.

Roughened. Exasperatus.—Applied to the calyx.

ROUND and ROUNDED. *Rotundum* and *Rotundatum*. Bent into a curve. For Circular see *Orbiculatum*.

Roundish leaf. Folium subrotundum. Nearly circular. *Orbiculato proximum*. Which is improper. See *Rotundum*.

RUGGED or Scabrous. *Scaber*. Rough with tubercles, or prominent stiffish points. Applied to the leaf and stem: also to the calyx of the Oak.

RUGOSUM folium. A Wrinkled leaf, *Cum venæ foliorum contractiores evadant quam discus, ut interjecta substantia adscendat*. When the veins are more contracted than the disk, so that the intermediate substance rises above them. As in *Sage*, *Primrose*, *Cowslip*, *Cistus incanus*, &c.

RUNCINATUM folium (*Runcina*, a large saw). A Runcinate leaf. *Pinnatifidum, ita ut lobi antice convexi, postice sint transversi*. A sort of pinnatifid leaf, with the lobes

lobes convex before and straight behind, like the teeth of the large double saw used in sawing timber. Exemplified in common *Dandelion*. This term does not occur in *Philosophia Botanica*, and was not originally distinguished by Linneus from his Pinnatifid leaf, of which it is only a variety.—*Runcina* seems rather to be a plane.

RUNNER. *Reptans flagellum*. A shoot producing roots and leaves at the end only, and thus propagating the plant: as in *Strawberry*. See *Sarmentosus*.

S

SABRE-SHAPED leaf. *Folium Acinaciforme*. See *Acinaciform*.

SAGITTATUM *folium* (from *Sagitta*, an arrow). A Sagittate leaf. Shaped like the head of an arrow,—*Triangulare, basi excavatum, angulis posticis instructum*. Philof Bot.—*Triangulare, angulis posticis*

cis acutis sinu divisis.—Triangular, hollowed at the base, with angles at the hinder part—or, with the hinder angles acute divided by a sinus.—As in *Convolvulus arvensis* and *Sepium*. *Sagittaria*. *Rumex Acetosa*, or common Sorrel. *Erica vulgaris*, or common Heath.—This term is applied also to the Stipula, as in *Pea*, and Anther, as in *Crocus*, *Elder*, &c.

SALVER-SHAPED. *Hypocrateriformis corolla*.
Monopetalous, rising from a tube, with a flat border.

SAP. *Succus*. The juice or watery part of the vegetable.—Also the tender white part of the wood (*Alburnum*), in trees; newly formed from the *liber* or inner bark.

SARMENTACEÆ (*Sarmentum*, the twig or spray of a vine; from *sarpo* to prune, which is from the Greek $\alpha\rho\pi\omega$, and that from $\alpha\rho\pi\eta$, a pruning-knife). The name of the forty-ninth order in Linneus's Fragments; and of the eleventh in his Natural Orders.

SARMENTOSUS *caulis*. A Sarmentose stem.

Repens subnudus. Philos. Bot.—*Filiformis geniculis radicanibus*. Delin. Pl.—Fili-form, almost naked; or having only leaves in bunches at the joints or knots, where it strikes root.—It seems to be in shrubs, what the runner is in herbaceous plants. See *Runner* and *Flagellum*.

SCABER. Scabrous or Rugged; something like Shagreen.—*Punctis eminentibus rigidiusculis exasperatus*. See *Rugged*. Hence

SCABRIDÆ. The name of the twentieth Order in Linneus's Fragments; and of the fifty-third in his Natural Orders.

SCABRITIES. *Ruggedness*. *Componitur particulis, nudis oculis vix manifestis, quibus adspargitur plantarum superficies*.—A sort of Pubescence, composed of particles scarcely visible to the naked eye, scattered over the surface of vegetables.

Scabrous. See *Rugged*.

Scal-

Scalloped leaf. This term may be applied to the *folium Repandum*, which see.

SCALY. *Squamosus*. A Scaly root or bulb: composed of scales lying over each other; as in the *Lily*.—A scaly stem or peduncle: having scales scattered over it.

SCANDENS caulis. A Scandent or climbing stem. *Alta petens, aliis sustinendus*. Weak, and requiring support in mounting; the clasper or tendril is usually the agent; as in the Everlasting Pea, and many other Leguminous plants.—It is different from *caulis volubilis*, which mounts by twining.

SCAPUS (from σκηπῶ, to lean upon; whence σκηπῶν, σκηπανιον, and σκηπῶρον, and the Latin *scipio*, for a staff; and *scapus*, the shaft of a column, and the straight stalk of an herb resembling it.) A Scape or Shaft.—According to Linneus—*truncus elevans fructificationem, nec folia*. A stem bearing the fructification, without leaves: as in *Narcissus*, *Pyrola*, *Hyacinthus*, &c. *Pedunculus* would with more propriety be rendered *Flower-stalk* than this.

SCARIOSUM folium. A Scariose leaf. Called *Skinny* by Dr. Withering. *Substantia sicca arida tactu sonora.* Of a dry substance, sonorous to the touch.—Applied to a perianth, which is membranous, tough, thin, and semi-transparent; as in *Statice Armeria*, or Thrift, *Centaurea glastifolia*, &c.—Also to the nectary; in *Narcissus poeticus*—*Spike*, &c.

SCATTERED. Sparsus. Applied to branches, leaves, &c. which come out without any apparent regular order. See *Sparsus*.

SCITTAMINEÆ s. Scitamina. (*Scitamentum* s. *Scitum edulium.* An eatable of a racy flavour, pleasant spicy plants.) The name of the third order in Linneus's Fragments; and of the eighth in his Natural Orders.—In the Artificial System these are in the first class.

SCORED stem. Exaratus caulis. Marked deeply with parallel lines, or rather grooves.—It does not seem to differ from *fulcatus*, furrowed or grooved.

SCUTELLUM (dimin. from *Scutum*, a buckler). *Fructificatio (Lichenum) orbiculata concava, margine undique elevato*.—An orbicular concave fructification (in some Lichens), with the edge raised all round. The *Pelta* is flat.

Scymitar shaped. See *Acinaciform*.

SCYPHIFER. Cup-bearing. A subdivision of the *Lichens*, having the fructification in an elevated obconical form, like a drinking-glass.

SECUNDUS (*Sequundus*, a *sequendo*, from following). *Floribus ad unum idemque latus versis*.—All turned towards one side—pointing one way—directed or inclining the same way. We have no proper English term for this. *One-ranked* tends to mislead, because a plant may have more ranks or rows of flowers than one directed to the same point of the horizon, or nearly so.—It is exemplified in the flowers of *Erica herbacea*—in the spike of *Daelylis cynosuroides*—and in the panicle of *Daelylis glomerata*, several of the *Festucæ*, &c.

SEED.

SEED. *Sēmen.* The rudiment or embryo of a new plant. Or, the deciduous plant of a vegetable, containing the rudiment of another vegetable of the same species, vivified by the pollen.—It is analogous to the egg in animals.

A Seed consists of three principal parts—1. The Tegument or skin. 2. The Albumen splitting into cotyledons or lobes. 3. The *Corculum*, Corcle or heart.—Some seeds also have a *Hilum* or eye—others an *Aril*—others again a coronet, *Coronula*: which is either the calyx adhering; a *Pappus* or Down; a wing; tail, hook, awn, or other process, to assist in their dispersion.

Seed-bud. See *Germen*.

Seed-coat. See *Aril*.

SEED-LEAVES. The primary leaves; being the cotyledons or lobes of a seed expanded, and in a state of vegetation.

Seed-lobes. See *Cotyledon*.

SEED-VESSEL. See *Pericarpium*.

SEGMENTA. Segments. The parts into which a calyx is cut.

SEGREGATA *Polygamia*. Segregate. Polygamy. *Cum flosculi plures Calyce communi comprehensi propriis Perianthiis etiam instructuntur*. When several florets comprehended within a common calyx are furnished also with their proper perianths.—These constitute the fifth order of the class *Syngenesia*.

SEJUGUM *folium*. A sejugous leaf; or a pinnate leaf having six pairs of leaflets.

SEMEN. See *Seed*.

SEMIAMPLEXICAULE *folium*. A half-stem-clasping leaf. Embracing the stalk half way.

SEMICOLUMNAR. See *Semiteres*.

SEMIFLOSCULUS. A Semifloret. *Flos semiflosculosus*. A Semiflosculous flower, or a flower

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a flower composed of semiflorets. These are terms of Tournefort's; and answer to the *corollula* and *corolla ligulata* of Linneus. Ray calls such compound flowers —*planipetali*. Hence

Semiflosculosæ or *Semiflosculosi*, the name of a sub-division in the order of compound flowers, both in the natural and artificial system of Linneus: comprehending such as are made up wholly of fertile ligulate florets; as *Dandelion*, *Lettuce*, *Sowthistle*, *Hawkweed*, &c.

Seminale folium. See *Seed-leaves*.

SEMINATIO. Semination, or the natural dispersion of seeds.

SEMIORBICULATUM *semen*. A semiorbicular seed. In shape of half a sphere.

SEMIQUINQUEFIDUS *calyx*. A half-five-cleft calyx.

S E

SEMISAGITTATA *stipula*. Shaped like half the head of an arrow: as in *Eryum tetraspermum*.

SEMISEXFIDUS *calyx*. Half-six-cleft.

SEMITERES. Semicolumnar. Flat on one side, and rounded on the other; as the stem of *Allium vineale*—and the leaves of *Narcissus Jonquilla*. Linneus calls them *Semicylindracea*.—Applied also to the petiole.

SEMPERVIRENTIA *folia*. Evergreen leaves. This is an improper expression: for though the plant be evergreen, the leaves are not so.

SENA *folia*. Six-fold leaves, or growing in sixes; as in *Galium spurium*, &c. A species or variety of the Stellate leaf.

SENSILES f. *Sensitivæ plantæ*. Sensitive plants. *Situm partium tactæ mutantés*. Changing the situation of their parts when touched.

S E

SENTICOSÆ (*Sentis*, "a brier or bramble").

The name of the thirty-fifth order in Linneus's Fragments, and Natural Orders.

SEPIARIÆ (*Sepes*; a hedge). The name of the twenty-fifth order in Linneus's Fragments; and of the forty-fourth in his Natural Orders: containing the hedge plants.

SERICEUM folium. A Silky leaf. *Tectum pilis appressis mollissimis.* Covered with very soft hairs pressed close to the surface.

Serpentine. See *Rependum*.

SERRATUS (from *Serra*, a saw). Serrate, toothed like a saw—but not sawed. *Quod angulis acutis imbricatis extremitatem respicientibus notatur.* Having sharp imbricated notches about the edge, pointing towards the extremity. The direction of the notches is the essential character of the Serrate leaf. They are not always imbricate, and that circumstance is omitted in *Delin. Pl.*—This term is applied to the

leaf in *Vaccinium Myrtillus*, *Arbutus Unedo* and *alpina*, *Papaver orientale*, and many others.

When a ferrate leaf has small ferratures upon the large ones, it is said to be Doubly-ferrate, *Duplicato ferratum*: as in *Elm*.

The term Serrate is applied also to the calyx in *Hypericum*—to the Corolla in *Tilia*, *Alisma*—and to the Stipule.

Serrato-ciliatum folium. A Serrate-ciliate leaf. Having fine hairs, like the eyelashes, on the ferratures.

Serrato-dentatum folium. A Serrate toothed leaf. Having the ferratures toothed.

Serrulatum folium. A ferrulate leaf. Finely ferrate, with very small notches, or teeth.

SESQUIALTER flosculus. A Sesquialteral floret. When a large fertile floret is accompanied by a small abortive one: as in *Aira villosa*.

S E

villosa. Haller applies this term to flowers in which the stamens are half as many again in number as the leaves or segments of the calyx or corolla.

SESSILE *folium*. A Sessile leaf. Connected immediately with the stem or branch, without the intervention of a petiole: opposed to the Petioled leaf.—Applied to a flower which has no peduncle: as in *Trillium sessile*.—To the Crown, *Pappus* or Down, which having no stipe is placed immediately on the seed: opposed to Stipitate or Stiped.

SETA. A Bristle. A strong, stiff, roundish hair. A sort of pubescence.—Linneus also puts it for the scape of the capsule in Mosses.

Setaceous. Bristle-shaped. Having the thickness and length of a bristle. Applied to the leaf; and to the leaflets or divisions of the calyx.

Setosus. Bristly. Having the surface set with bristles. Applied to the Leaf and to
the

the Receptacle.—These two terms are sometimes confounded, though nothing can be more distinct.

SEXANGULARIS *caulis*. A hexangular stem: as in *Eriocaulon*.

SEXFIDUS *calyx*. Sexfid, or six-cleft; as in *Pavia*.—*Sexfidum nectarium*. A six-cleft nectary: as in *Narcissus minor*.

SEXLOCULARE *pericarpium*. A six-celled pericarp: as in *Asarum*, *Aristolochia*.

SEXUS. Sexes in vegetables are, 1. *Male*. 2. *Female*. 3. *Hermaphrodite*. Having the two first in the same flower. 4. When they are separate, either on the same or different individuals; such plants are called *Androgynous*. 5. When Hermaphrodites are accompanied with one or both of the two first, such a plant is denominated *Polygamous*.

Shaft. Put by some authors for the style.

SHAGGY. *Hirsutus*.

SHARP.

S H

SHARP. *Acūtus.*

Sharp-pointed or pointed. *Acuminātus.*

SHEATH. *Vagīna.* A membrane investing a stem or branch; as in *Grasses*.—Very different from *Spatha*, which see.

Sheathed. *Vaginātus.* Invested by a sheath or cylindrical membranaceous tube, which is the base of the leaf: as the stem in *Polygonum amphibium*, and the culm in *Grasses*.

Sheathing. *Vaginans.* When a leaf invests the stem or branch by its base in form of a tube: as in *Polygonum*, *Rumex*, *Cistus incanus*.—Applied also to the Petiole and Stipule.

Shining. See *Lucidus*.

Shoot. See *Surculus*.

SHRIVELLING, or Withering. *Marcescens.*
Decaying without falling off: as the corolla of *Plantain*.

SHRUB. *Frutex.* In its general acceptation,

tion, it is a vegetable with several permanent woody stems, dividing from the bottom, more slender and lower than in trees. Linneus makes the distinction of a shrub from a tree to consist in its having no buds: but trees have not buds in hot climates. He acknowledges indeed that nature has placed no limits between them.

Sbrubby. Fruticōsus. Perennial, with several woody stems.

SICKLE-SHAPED. *Falcātus.* Applied to the keel of a papilionaceous flower.

SILICULA (dimin. from *Siliqua*). A Silicle, Silice, little Pod or Pouch. A two-valved pericarp, having the seeds fixed along both futures, and the transverse diameter equal, or nearly so, to the longitudinal. This pericarp varies in shape; being orbiculate, ovate, or flattened; entire at the end, or emarginate. Hence

SILICULOSA. The name of the first order in the class *Tetradynamia*.

SILIQUA. A Silique or Pod. An oblong, mem-

membranaceous, two-valved pericarp, having the seeds fixed along both futures.—The *Silicula* does not differ from this essentially, but only in form and size. Accordingly Linneus, in *Philos. Bot.* gives an explanation common to both—*Pericarium bivalve, affigens semina secundum futuram utramque*—and makes no mention of *Silicula*.—The proper *Siliqua* is two-celled, having a partition running the whole length of it. Some pericarps, however, having the same form, take the same name, although they have no partition, and are therefore one-celled; as in *Fumaria*, and *Cbelidonium*.—When *antique*, *critique*, and *burlesque* were first introduced into our language, they were written *antick*, *critick*, and *burlesk*: had this orthography obtained, we should have written this pericarp *Silick*, and thus have avoided the French termination. I shall not contend with any one who would retain the Latin final; nor with any other who would appropriate the English term *Pod* to this, exclusive of the Legume.

SILIKUOSA. The name of the second order in the class *Tetradynamia*: containing those plants which have a proper *Siliqua* for a pericarp.

SILIKUOSÆ. The name of the fifty-seventh order in Linneus's Fragments; of the thirty-ninth in his Natural Orders; and of the twentieth class in Ray's method. They are the same with the *Cruciformes* of Tournefort.

SILKY leaf. *Sericeum folium.* Covered with a fine pile of soft close-pressed hairs, so as to be very smooth to the touch.

SIMPLEX. Simple. Undivided.—*Simplex Radix.* A Simple root. Not subdivided. Opposed to branched.—*Simplex caulis.* A Simple stem. *Continuata serie versus apicem extenditur.* Extended in one continued series from the bottom to the top. Opposed to *Compositus* or compound.—*Simplex folium.* A simple leaf. Having only one on a petiole. Opposed also to Compound.—*Simplex Fructificatio* f. *Flos.*
A Sim-

A Simple fructification or flower; in opposition to that which is composed of several florets.—A Simple spike. Having no subdivisions, spicules or spikelets.—

A Simple Umbel. Having only one set of rays, or having the receptacle divided once only: as in *Anthriscus Pecten*.—

Simplex Calyx. A simple calyx. Having only one row of leaflets, as in *Tragopogon*; opposed to *Calycled* and *Imbricate*.—*Simplex Pappus*. A simple down: opposed to *Plumosus* or feathered.—Applied also to Bristle, Tendril, Stigma, &c.

Simplicissimus. Very simple, absolutely simple.—As the stem of *Lathræa Squamaria*; and the spadix of *Acorus*.

SINGLE flower. *Unicus flos*. Only one on a stem, as in the *Tulip*; opposed to many.—In common language, it is used in opposition to a double or monstrous flower.

SINUATUM folium. A Sinuate leaf. Having large curved breaks, in the margin, resembling bays (*Sinus*). As in the *Oak*.

Sinuato-

Sinuato-angulosum. A sinuate-angular leaf:
as in *Hollybock*.

Sinuato-dentatum. A sinuate-toothed leaf

Sitting. See *Sessile*.

SITUS foliorum. Situation of leaves. Their disposition on the stem: as *stellate*, *tern* or *threefold*, &c. *Opposite*, *alternate*, *scattered*, *crowded*, *imbricate*, *fascicled* or in bundles, *distich* or in two rows.

SIX-PETALLED. *Hexapetala corolla.* A flower having six distinct petals to the corolla.

Skinny. See *Scariosum*.

SLEEP of Plants. *Somnus plantarum.* The form and appearance which plants put on during the night, very different from what they have in the day; chiefly in the leaves.

SLENDER. *Tenuis.* Applied to the seed.
Tenuifolia planta. A slender-leaved plant:
in

in opposition to *latifolia*, broad-leaved.—
Tenuis however is often put for *thin*.

SMOOTH. *Glaber*. Having a slippery surface void of roughness. Opposed to scabrous, not to *pilosus*, hairy: and exemplified in *Daphne Laureola*, *Arbutus Unedo*, *Geranium peltatum*, &c. Greater degrees of smoothness are expressed by *nitidus* or *nitens* and *lucidus*; shining, bright, glittering, glossy, &c.

Snipt leaf. *Folium incisum*. See *Gashed*, and *Incisum*.

Solares Flores. See *Vigiliæ*.

SOLIDUS *bulbus*. *Solida radix*. A solid bulb; as in *Tulip*. A solid root; as in *Turnep*. Of a fleshy, uniform, undivided substance.—*Solidus caulis*. A solid stem. Full within; in opposition to *inanis*, which has only a light spongy substance in it; and *fistulosus*, hollow like a pipe.

SOLITARIUS. Solitary, separate, one only in a place. *Solitaria stipula*. A solitary stipule; as in *Melianthus*.—*Solitarius pedunculus*.

stunculus. A solitary peduncle; as in *Convolvulus tricolor*.—*Solitarius flos*. A solitary flower: only one to each peduncle; as *Euphorbia Peplis*, *Dianthus chinensis*.—*Solitarium semen*. A solitary seed: one only in a pericarp.

SOLUTUS. *Loose*. Opposed to *adnatus*. Applied to Stipules.

SOMNUS Plantarum. Sleep of Plants. *Est forma faciesque, quam plantæ sub nocte induunt, maxime a diurna earum facie diversam, nulla habita ratione partium internarum seu fructificationis. Estque in foliis præsertim conspicuus.*

SPADIX. The receptacle in Palms, and some other plants, proceeding from a spathe.—It is either branched, as in *Palms*; or simple, as in *Dracontium*, &c.—In some it is one-flowered; in others many-flowered.—Hence

Flos spadiceus. A spadiceous flower. A sort of aggregate flower, having a receptacle common to many florets, within a spathe.—As *Palms*, *Arum*, *Calla*, *Dracontium*, *Pothos*, *Zostera*, *Acorus*.

Spadiceus

S P

Spadiceus color. The colour of the spadix in the Palm; it is commonly translated a Bay-colour, from the Greek βαίος. Ray says it is a colour approaching to bay or chesnut, but with more red in it.

SPAN. A long span, or *Dodrans*—a short span, or *Spithama*. See *Measures*.

SPARSUS. Scattered. Neither opposite nor alternate, nor in any apparent regular order. Applied to branches—to leaves, as in several sorts of Lily—to peduncles or flowers—to calycine scales, as in *Crepis barbata*. “With regard to branches,” says Dr. Berkenhout, “an accurate observer will find that, notwithstanding their irregular appearance, they form a spiral line round the trunk, regularly completing the circle in a determinate number of steps.”

SPATHE. A Spathe (Sheath is the English term for *Vagina*). The calyx of a spadix, opening or bursting longitudinally, in form of a sheath.—It is applied also to the calyx of some flowers which have no spadix; as *Narcissus*, *Crocus*, *Iris*, &c.

S P

A Spathe may be—

One-valved, or two-valved.

Halved. *Dimidiata*. Investing the fructification on the inner side only.

Imbricate.

One-flowered, two-flowered, &c.—Hence

Spathaceæ. The name of the eighth order in Linneus's Fragments; and of the ninth in his Natural Orders.

SPATULATUM folium. A Spatulate or Spatula-shaped leaf. *Cujus figura subrotunda, basi angustiore lineari elongata*. Roundish, with a long, narrow, linear base: like a spatula or a battledore: as in *Cistus incanus*.

Spear-Shaped. See *Lanceolatum*.

SPECIES. The distinct forms of vegetables originally so created, and producing, by certain laws of generation, others like themselves.—There are therefore as many species as there are different invariable forms or structures of vegetables now existing. We commonly use the same termination both in the singular and plural,

as

as we do in some other words of the same structure from the Latin. The duplication of the final is disagreeable to the ear, and I suppose that we acquiesce the more readily in this anomaly, because so many of our plurals terminate in *es*.

Specific Character. A circumstance or circumstances distinguishing one species from every other species of the same genus.

Specific Name. Prænomen triviale. Commonly called the Trivial Name.—One of those happy inventions of Linneus, by which he has facilitated and diffused the science of Botany in a wonderful manner—A plant is perfectly named, says Linneus (Philos. Bot. 202), when it is furnished with a *generic* and *specific* name.—In the same page he distinguishes the latter from the *nomen triviale*; and calls it the Essential Difference.—*Nomen specificum legitimum plantam ab omnibus congeneribus distinguat; triviale autem legibus etiamnum caret.*—*Nomen specificum est itaque Differentia essentialis.*

SPICA (from *Spes*, hope; from $\sigma\pi\iota\zeta\omega$, to extend; or from $\sigma\pi\alpha\chi\upsilon\varsigma$, Æol. for $\sigma\lambda\alpha\chi\upsilon\varsigma$, whence *Spicus*, *Spica*, and *Spicum*; for it is used in all the three genders). A Spike. — *Flores sessiles sparsim alterni in pedunculo communi simplici*.—In Term. Bot. 461, *sparsim* is omitted.—A species of inflorescence, in which sessile flowers are (scatteringly) alternate on a common simple peduncle.—As in an ear of *Wheat*, *Rye*, or *Barley*; many of the *Grasses*; in *Lavender*, *Mullein*, *Agrimony*, &c.—A Spike is

1. Simple, Distich, Compound, Glomerate.
2. Ovate, Cylindric, Ventricose, Interrupted.
3. Imbricate, Jointed, Branching, One-ranked (*secunda*), Linear, Ciliate, Leafy, Bristle-shaped, Comose or terminated with a bush of leaves, Scariosa.

SPICULA. A Spicule or Spikelet. A partial spike, or a subdivision of it: as in some *Grasses*.

SPINA. A Spine or Thorn.—*Mucro e ligno plantæ protrusus*.—*Fulcrum terminans cornu lignoso*. Regn. Veg.—See *Thorn*.

SPINDLE-

SPINDLE-SHAPED root. See *Fusiformis*.

Spinescens. Spinescent. Becoming hard and thorny. Incident to petioles and stipules.

Spinosus. Spiny or Thorny.—*Spinosum folium*. Quod margine exit in acumina duriora, rigida, pungentia. Opposed to *Inerme*.—*Spinosus caulis*. *Spinis armatus*.

SPIRALIS. Spiral. Twisted like a screw. As the cotyledons of the *Holeraceæ*; the anthers of *Chironia*; the tails of the seeds in *Geranium*, &c.

SPITHAMA. A short Span, or seven Paris inches. See *Measures*.

SPREADING. *Patens*. Spreading a little, *Patulus*. See these two words.

SPUR or Horn. *Calcar*, *Cornu*. The hinder part of the nectary in some flowers, shaped like a cock's spur, or a horn.—This kind of nectary is called *Nectarium calcaratum*; and a corolla having such a nectary is named *Corolla calcarata*; as in *Larkspur*, *Orchis*, &c.—A calyx having such a spur is called *Calyx calcaratus*; as in *Tropæolum*.

SQUAMOSUS f. SQUAMATUS (*Squama*, a Scale). *Bulbus, Caulis.* See *Scaly*.

SQUARROSUS (*A squamarum piscium similitudine, quorum cutis exurgat ob assiduam inluviem.*

Varronum ac rupicum squarrosa incondita rostra. LUCILIUS.

Or, according to others, from *Squarra*, anciently written *Scara*, which is from the Greek *εσχαρα*, scurf). Squarrose, by some translated Ragged; by others, Scurfy. Squarrosus calyx. *Ex squamis undique divaricatis patentissimis.* Consisting of scales very widely divaricating, or spreading every way: as in *Carduus, Onopordum, Conyza, Achyranthes muricata*.—Squarrosum folium. *In lacinias elevatas nec plano parallelas divisum.* Divided into shreds or jags, raised above the plane of the leaf, and not parallel to it.

STALK, or Stem. *Caulis.* See *Stem*.

STAMEN. A Stamen; in the plural Stamens, not Stamina, in English.—*Viscus pro pollinis præparatione.*—*Viscus exterius e ligno.*
Genitale

S T

Genitale masculum. Regn. Veg.—An organ or viscus for the preparation of the pollen; and formed, according to Linneus, from the wood.—It is the third part in the fructification; and consists of the *filament* and *anther*.—Some English writers call it the *Chive*.

Stamineus flos. A stameneous flower. Having no corolla: a term used by Ray. *Apetalus* is the term which Linneus has adopted from Tournefort. Others call such flowers Imperfect or Incomplete.

Staminiferus flos. A staminiferous flower. Having stamens without a pistil. The same with the male flower of Linneus.—*Staminiferum nectarium.* A nectary having stamens growing on it: as in *Kleinbovia*.

STANDARD or Banner. *Vexillum.* The upper petal of a papilionaceous corolla: as in the *Pea*.

STATUMINATÆ (from *Statumen*, a prop or support, as the stakes put to vines, &c. from *statuo*). The name of the sixty-first order in Linneus's Fragments of a
Natural

Natural Method, in *Philosophia Botanica*; containing only *Ulmus*, *Celtis*, *Bosæa*.

STELLATA (*Stella*, a star) *folia*. Stellate leaves. *Cum folia plura quam duo verticillatim caulem ambiunt*. When more leaves than two (seldom fewer than four, frequently six, eight or more) surround the stem in a whorl; or radiate from the stem like the spokes of a wheel; or like a star, as it is vulgarly represented: exemplified in *Galium*. They are otherwise called *Verticillata*; and come out regularly in sets one above another.—*Stellata seta*. A Stellate bristle. When a little star of smaller hairs is affixed to the end.—Applied also to the Stigma: as in *Asarum*. *Stellatus flos*. A Stellate flower. The same with the *Radiatus* of Tournefort, which Linneus has adopted.

Stellatæ. The name of the forty-fourth order in Linneus's Fragments, in *Philos. Bot.*—and the forty-seventh in his Natural Orders, at the end of *Gen. Pl.*—The name of a class also in Ray's and Herman's Methods.

STEM

S T

STEM or **Stalk.** *Caulis.* The body of an herb, bearing the branches, leaves and fructification.—According to Linneus, *Truncus* is the generic term, of which *Caulis* is a species; but in English we apply *Trunk* to the body of a tree, and *Stalk* to that of herbaceous plants.—*Stem* might be adopted as the generic term. See *Truncus*.

Stem-clasping. *Amplexicaulis.* Applied to a leaf (*folium amplexicaule*), when the base surrounds the stem: as in *Potamogeton perfoliatum*, *Verbascum Blattaria*, *Hyoscyamus niger*, &c.—Applied also to the petiole.

Stem-leaf. *Folium caulinum.* Inserted into the stem. Opposed to the radical or root-leaf. Applied also to the peduncle.

Stemless. *Acaulis.* Having no stem, properly so called. Opposed in *Philos. Bot.* (p. 233) to *Caulescens*.

Sterilis flos. A Barren flower. A term of Tournefort's. Called *Masculus flos*, or Male flower, by Linneus.—Ray calls it *Paleaceus*, and others *Abortiens*, and *Staminiferus*.

STIFF.

STIFF. *Rigidus*. Impatient of bending.
See *Rigidus* and *Strictus*.

STIGMA. (From ($\sigma\tau\iota\zeta\omega$, *inuro*, to brand or mark.) A Stigma.—*Summitas pistilli madida humore Pollen rumpendo*—*Roridum, pubescens, supremum*. Regn. Veg.—The top of the pistil, pubescent and moist, in order to detain and burst the Pollen or prolific powder.—Grew named it the *Knob* or *Button*; and Withering the *Summit*.—I have sometimes asked myself, how Linneus came not to adopt the more elegant, classical term of *Fibula*, which had been given to this part of the pistil by some authors who wrote before him?

The Stigma differs in number, figure, and structure.—It is

Simple or *divided*.

Acute; ending in a sharp, single tip.

Perforated; having a cavity in the middle.

Capitate; shaped like a head or globular.

Peltate; or shaped like a round buckler;
or like the foregoing, flatted by the stroke of a hammer.

Bila-

S T

Bilamellate; Capitate or globular, compressed, and longitudinally bifid.

STIMULI (q. *Stigmuli*, from *στίγμος*). Stings.

In *Philos. Bot.* a species of pubescence; defined to be—*punctura venenata quæ animalia nuda arcent*. Exemplified in *Urtica* or *Nettle*, *Iatropka*, *Acalypha*, *Tragia*.—In *Term. Bot.* 393, they are separated from *Pubes*, and enumerated with thorns and prickles, among *Arma*, the defences of plants against animals.—They are thus defined—*mucrones puncturas inflammatorias efficientes, unde pruriginosæ evadunt partes*. Processes or sharp points from a plant, producing inflammatory itching punctures.—They are usually on the stem or leaf; which is then called *Urens*.

STIPES (*στυπος*, a *stake*). A Stipe. *Basis frondis*. *Proprius Palmis, Filicibus, Fungis*.—*Truncus in folia transiens*. *Delin. Pl.*—*A folio non distinctus*. *Regn. Veg.*—The base of a frond: or, a species of stem passing into leaves, or, not distinct from the leaf. The stem of a *Fungus* is likewise called *Stipes*: which Dr. Withering translates the Pillar.

It

S T

It is also put for the thread or slender stalk, which supports the *pappus* or down, and connects it with the seed. *Filum elevans connectensque Pappum & Semen.*

Stipitatus. Stipitate or Stiped. Elevated on a Stipe. Applied to the *pappus* or down.

STIPULA (dimin. from *Stipa*, which is from $\sigma\upsilon\pi\eta$ *toṡ*). A Stipula or Stipule.—*Squama basi petiolorum nascentium adflans.* A scale at the base of the nascent petioles—or peduncles, according to *Philos. Bot.*—As in *Papilionaceæ*, *Tamarindus*, *Cassia*, *Rosa*, *Melianthus*, *Liriodendron*, *Abricot*, *Peach*, *Bird-cherry*, &c.—Some natural classes have no stipules; as the *Asperifoliæ*, *Personatæ*, *Verticillatæ*, *Stellatæ*, *Siliquosæ*, *Liliaceæ*, *Orchideæ*, and most of the *Compositæ*.—

Stipules are,

1. In pairs; Solitary; or None.
2. Lateral; Extrafoliaceous; Intrafoliaceous; Oppositifolious.
3. Caducous; Deciduous; Permanent; Spinescent.
4. Sessile; Adnate; Decurrent; Sheathing.
5. Su-

S T

5. Subulate; Lanceolate; Sagittate; Lunate.
6. Erect; Spreading; Reflex.
7. Very Entire; Serrate; Ciliate; Tooth-
ed; Cleft.
8. Very Short; Middling; Long.

Stipularis f. *stipulacea gemma*. A Stipular bud. Formed of stipules or scales.

Stipules glandulæ. Glands growing on stipules, or close to them.

Stipulatio. Stipulation. The situation and structure of the stipules.

Stipulatus caulis. A Stipulate or stipuled stalk. Having stipules on it.

STOLO. A Sucker from the root. See *Sucker*.

Stoloniferus caulis. A Stoloniferous stem. Putting forth suckers.

Straddling. Put by Dr. Withering for *Divaricatus*.

STRAIGHT stem. *Rectus caulis*. Making one right line; not bent.—*Erectus* is upright, or perpendicular to the horizon.—
Rigidus

S T

Rigidus is stiff, difficult to bend. *Strictus* is both stiff and straight.

Sraightish. Rectiusculus.

STRAP. *Ligula.* An appendage to the leaf in some Grasses.—Also the flat part of the corollet in ligulate florets.

Strap shaped. See *Ligulatus*. Dr. Withering has given this name to the linear leaf.

STRIATUS. Striated or Streaked.—*Striatus caulis, culmus.* *Lineis tenuissimis excavatis inscriptus.* Stalk or Culm—marked or scored with superficial or very slender lines. In the explanation of the Striated leaf the word *parallel* is added.

STRICTUS (*Stringo*, to tie fast). Stiff and straight.

Strict will not do in English, and I do not recollect that we have any one word to express this idea. Straight is put for *rectus*, and Stiff for *rigidus*.—Linneus in one place refers *Stricta (folia)* to *Recta*; adding, that it strengthens the signification, and means the same as *Rectissima*.

Philos.

Philos. Bot. p. 219.—In another place (p. 233) he opposes *strictus* to *laxus*, *flaccidus*.—In *Term. Bot.* 28, *Erectus* is explained to be a stem rising in almost a perpendicular direction—*Strictus* (29), to be altogether perpendicular without bending.—I do not conceive that this term has any thing to do with perpendicularity of direction.

It is applied to the stem in *Astragalus fulcatus*, &c.—to the culm—branch—leaves, in *Campanula patula*—and to the peduncle.

Strictissimus. Very stiff and straight. Applied to branches.

STRIGA (from *Strigo* for *Stringo*). In *Term.*

Bot. 363, *Strigæ* are thus described—*pili rigidiusculi planiusculi*.—In *Philos. Bot.* Linneus only says—*arcent setis rigidis animalcula & linguas*; and gives for examples *Cactus*, *Malpighia*, *Hibiscus*, *Rubus*.—They seem to be stiffish, flattish bristles—and from the derivation we should suppose that they grow in a sort of order or rank. Their use is to keep off the smaller animals, and the tongues of larger ones, from injuring the plants.—

We have no English name for this term.

STRIGOSUS (from *Strigo*). *Strigosum folium*. A Strigose leaf. *Aculeis lanceolatis rigidis*. Set with stiff lanceolate bristles. *Term. Bot.* 246. In *Philos. Bot.* Linneus refers to *Hispidum*. Dr. Berkenhout interprets it, lank, lean, or drawn up as if hide-bound; I know not on what authority, but probably misled by one sense of the verb *strigare*, which is, to leave a furrow unfinished in ploughing; whence a horse or ox unable to go though his work was called *Strigosus*.

STROBILUS. A Strobile. *Pericarpium ex Amento factum—squamis induratis*, is added in *Term. Bot.* 618.—A Pericarp formed from an Ament—by the hardening of the scales.—In *Regn. Veg.* it is thus expressed—*Strobilis imbricatus Amenti coarctati*. That is, a Strobile is made up of scales that are imbricate, or lie over each other, from an Ament contracted or squeezed together, in this state of maturity.—This term includes not only the Cone of former writers, but also some other fruits which recede considerably in structure

structure from that sort of pericarp; as that of *Magnolia*. To translate *Strobilus* therefore by *Cone* is improper, as creating confusion.

Strobiliformis spica. A Strobile-shaped spike: as in *Justicia Ecbolium*.

STYLUS (from *στυλος*, a column). The style. *Pars pistilli, stigma elevans a germine*—or, as it is expressed in another passage of Philos. Bot.—*pes stigmatis, connectens illud cum germine*. The middle portion of the pistil, connecting the stigma with the germ.—It is called by some English Botanists the *Shaft*.—We are to attend to the number, proportion, situation, division, and figure of Styles.

The most common figures are—1. *Capillary*, or hair-shaped. 2. *Filiform*, or thread-shaped. 3. *Cylindric*. 4. *Subulate*, or awl-shaped. 5. *Clavate*, or club-shaped.

In situation they may be—1. *Erect*, or upright. 2. *Declined*, or bending down. 3. *Ascending*, or bending up.

SUB, in composition, is used frequently by Linneus for *almost*, *nearly*, *somewhat*, *thereabouts*, *approaching to*, *most commonly*.

We must consider the meaning of the word to which it is the prefix, in order to determine which of the English Adverbs we should prefer. In some cases perhaps we may preserve the Latin prefix: in others we may use the English termination *ish*: as *subrotundus*, *roundish*. Though it were to have been wished, for distinction sake, that we might express the Latin *sub* by some of the foregoing adverbs; and the diminutive termination *usculus* by *ish*. Thus *subobtusus*, somewhat blunt; *obtusiusculus*, bluntish.—The following are some instances of the use of *sub*, among many:

Subacaulis. Almost without stem.

Subæqualis. Nearly equal.

Subamplexicaulis. Slightly embracing the stem.

Subcordatus. Subcordate. Somewhat heart-shaped.

Suberosus. As if a little eaten or gnawn.

Subexcedens. A very little longer.

Sub-

S U

Sublanatus. Somewhat woolly.

Subnudus. Almost naked.

Suborbiculatus. Almost orbiculate.

Subovatus. Subovate. Almost or nearly ovate.

Subpetiolatus. Scarcely petioled, or with a very short petiole.

Subramosus. Having only a chance branch or two.

Subrepandus. Somewhat repand.

Subsessilis. Subsessile, or almost sessile.

Subtrifidus. Slightly trifid.

Subuniflorus. Having one or two flowers only, or most commonly one—one or thereabouts.

Sometimes however *Sub* has the common meaning of *Under*: as *folium submersum* is a leaf growing under water. *Herbæ submarinæ.* Herbs growing at the bottom of the sea.—*Subdivisus* does not mean somewhat or a little divided, but *divided again*, in the usual sense of our English *subdivided*.

SUBEROSUS (*Suber, cork*). Corky, like cork.

Applied to a stem clothed with a bark, soft and elastic like cork—To be carefully distinguished from *sub-erosus*, which is applied to leaves which have little irregular sinuses on their edges, giving them the appearance of having been gnawed by insects. Applied also to the stem in *Aristolochia peltata*.—In this case it seems better to drop this equivocal term, in English.

SUBSTANTIA. The substance of a vegetable consists of the *Epidermis*, or Cuticle, covering the *Cortex* or Outer Bark, depositing from its inner surface the *Liber* or Inner Bark, which changes gradually into hard rings of *Wood*, clothing the *Medulla* or Pith.—Or, taking it the other way, it is the *Medulla* or Pith clothed by the wood, which is formed from the *Liber*, separating from the *Cortex*, and covered by the *Epidermis*.

SUBULATUS (*Subŭla, an awl*). Subulate, or awl-shaped (not, *awled*). *Folium subulatum*. A subulate leaf. *Inferius lineare, ad versus apicem attenuatum*. Linear at bottom,

S U

bottom, but gradually tapering towards the end. As in *Arenaria saxatilis*, *Sedum rupestre*.—Applied also to the Filament, in the class *Didynamia*, &c.—to the scales of the Calyx, in *Dianthus chinensis*—to the Stipule, Anther, Style and Receptacle.

SUCCULENTÆ (*succus*, juice). The name of the forty-sixth order in Linneus's Fragments, and of the thirteenth in his Natural Orders.

SUCCULENTUM *folium*. A Succulent leaf. Full of juice; in opposition to *Exsuccum*, juiceless or dry. Applied also to the Drupe, as in the Plum or Peach; opposed to *Sicca*, dry, as in the Almond.

SUCKER. *Stolo*. A shoot from the root of a vegetable, by which it may be propagated: as in *Violet*, *Ranunculus repens*, and most *Shrubs*. See *Runner* and *Sarmentosus*.

SUFFRUTEX (*Sub* under, and *Frutex* a Shrub). An Undershrub. Permanent or woody at the base, but the yearly branches decaying; usually of a lower growth than the

S U

Frutex or Shrub: as in *Lavender*, *Sage*, *Thyme*, &c.

SUFFRUTICOSUS. Suffruticose, Under-shrubby.

SULCATUS (*Sulcus*, a furrow) *Caulis*, *Culmus*. A Furrowed, grooved or fluted stem or culm. Scored with deep broad channels longitudinally. Applied also to succulent leaves.

Super-decompound. See *Supra-decompositum*.

SUPERFICIES. The surface or disk of a leaf.—The upper surface is called *Pagina superior*, or *discus supinus*; the lower, or back of the leaf, *Pagina inferior*, or *discus pronus*.

SUPERFLUA Polygamia. Superfluous Polygamy. The name of the second order in the class *Syngenesia* wherein the florets of the disk are hermaphrodite and fertile; and the florets of the ray, though female only, are also fertile.

SUPERUS flos f. calyx. A Superior flower or calyx. Having the receptacle of the flower

S U

flower above the germ. *Superum germen.*

A superior germ. Included within the corolla: this must have an inferior calyx; and the contrary.

SUPINUS *discus folii.* The upper surface of a leaf.

Support. See *Fulcrum.*

Supra-axillaris. See *Supra-foliaceus.*

SUPRA-DECOMPOSITUM *folium.* A Super-decompound leaf. *Cum petiolus aliquoties divisus adnectit plurima foliola.* When a petiole divided several times connects many leaflets; each part forming a decompound leaf: as in *Pimpinella glauca*, *Ranunculus rutæfolius*.—*Tergeminate*, *Triternate*, and *Tripinnate* leaves are species of this; and are explained in their proper places.

SUPRA-FOLIACEUS *f. Supra-axillaris pedunculus f. flos.* A peduncle or flower inserted into the stem above the leaf, or petiole, or axil.

SURCULUS. A little branch or twig. *Quod*
in

in ramis simplex assurgit tenerum & exile.

—A shoot.—It is probably a diminutive from *Surus* or *Surrus*, an old word for a large branch, such as was fit to make a stake or palisade of. The original word was probably *Surcus* from *Surgo*, which was anciently *Surco*.—Linneus puts *Surculus* for a branchlet of Moss, and a shoot of Ferns.

SWIMMING or Floating leaf. *Natans*. Lying on the surface of the water.

SWORD-SHAPED leaf. *Folium Ensiforme*.
See *Ensiform*.

SYNGENESIA (συν and γένεσις, *congeneration*). The name of the nineteenth class in Linneus's Artificial System; comprehending those plants which have the anthers united into a cylinder.—The orders are six—1. *Polygamia Æqualis*. 2. *Polygamia Superflua*. 3. *Polygamia Frustranea*. 4. *Polygamia Necessaria*. 5. *Polygamia Segregata*. 6. *Monogamia*.—The five first orders contain the Compound flowers, and form a Class truly Natural.

Sys-

SYSTEMA. A System is a regular arrangement of natural bodies, according to some certain characters.—In Botany it consists of five members or divisions—1. Class. 2. Order. 3. Genus. 4. Species. 5. Variety.

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TAIL. *Cauda*. A process or thread terminating a seed, and facilitating its propagation.—This term was used formerly for the narrow base of a petal in a polypetalous corolla, which Linneus calls *Unguis*, the Claw.

Tapered or *Tapering*. See *Attenuatus*.

Taper-pointed. See *Acuminate*.

Target-shaped. See *Peltatum*.

TENDRIL or Clasper. *Cirrus*. One of the Fulcres. A filiform spiral band, by which a plant is fastened to another body—or by which a weak plant supports itself on others: as the Vine, Pea, &c.

A Ten-

T E

A Tendril is,

1. *Axillaris*, from the axil.
2. *Foliaris*, from the leaf.
3. *Petiolaris*, from the petiole or foot-stalk.
4. *Peduncularis*, from the peduncle or stalk.

Or it is,

1. *Simple*.
2. *Trifidus*, or three-cleft.
3. *Multifidus*, many-cleft.
4. *Diphyllus*, *tetraphyllus*, &c. Two-leaved, four-leaved, &c.
5. *Polyphyllus*, many-leaved.
6. *Convolutus*, turned inward.
7. *Revolutus*, turned back after having made half a turn.

TENUIS is put both for *Slender* and *Thin*.
Tenuifolia planta. A plant with narrow leaves.

TERES. Without angles. It may often be safely expressed in English by *Round*.
Since

T E

Since we cannot well preserve the Latin term, it is more accurate to translate it by *Columnar* than by *Cylindric*. For stems, and branches, leaves, petioles, and peduncles, to which it is applied, resemble the shaft of a column, tapering gradually from the bottom upwards. *Allium vineale* and *oleraceum* are instances of columnar leaves.

Teretiusculus. Almost or inclining to columnar.

Semiteres is Semicolumnar. Flat on one side and round on the other.

TERGEMINUM folium. A Tergeminate or thrice-double leaf. *Petiolus bifidus utroque apice foliola duo & insuper foliola duo ad divaricationem petiola communis*.—When a forked petiole is subdivided, having two leaflets at the extremity of each subdivision; and also two other leaflets at the division of the common petiole. Thus I understand it, though the explanation given above from *Delin. Pl.* does not express as much; because it is a species of the Super-decompound leaf, the essence of which

which I apprehend to consist in its dividing thrice at least.

TERMINALIS. Terminating, or coming out at the end of a branch or stem. Applied to scape, peduncle, flower, spike, cyme, anther, awn, and thorn. Opposed to axillary.

TERNA folia. Three-fold leaves, in threes, or three and three: expressing the number of leaves in each whorl or set. As in *Statice sinuata*. See *Stellata*.

Terni pedunculi. Peduncles in threes, or three together from the same axil: as in *Impatiens zeylanica*.

Terni flores. Flowers growing three and three together; as in *Bete Cicla*.

TERNATUM folium. A Ternate leaf. Having three leaflets on one petiole: as in *Trefoil*, *Strawberry*, *Bramble*, &c.—Linneus makes it a species of the *Digitate*.

Doubly-ternate. See *Biternate*.

Triply-

T E

Triply-ternate. See *Triternatum*.

TESSELATUM *folium, petalum.* A Tessellate or chequered leaf or petal. Painted or spotted like a chess-board.—For the leaf, Linneus refers to *Satyrium repens*, and *Cypripedium bulbosum*: and as an instance of a flower, we may cite *Fritillaria Meleagris*.

TETRADYNAMIA (τεσσαρες *four*, and δυναμις *power*). The name of the fifteenth class in the Linnean System; comprehending those plants which bear hermaphrodite flowers with six stamens, four of them (more powerful) longer than the other two. This is a truly natural class, and the same with the *Cruciformes* of Tournefort—the *Siliculosæ* and *Siliquosæ* of Ray; which last are the names of the orders into which the class is divided by Linneus.

TETRAEDRA *siliqua.* A four-sided siliqua or pod.

TETRAGONUS *caulis.* A four-cornered stem.
—Having four prominent longitudinal angles: as in *Passiflora alata*. A species
of

T E

of the *Anceps*, according to Linneus in *Philos. Bot.*

TETRAGYNIA (τεσσαρες and γυνη). One of the orders in several classes of Linneus's System; comprehending those plants which have four pistils.

TETRANDRIA (τεσσαρες and ανηρ). The fourth class in the Linnean System; comprehending those plants which have hermaphrodite flowers with four stamens of equal lengths.

TETRAPETALA corolla. A tetrapetalous or four-petalled corolla. Consisting of four distinct petals: as in the class *Tetradynamia*.

TETRAPHYLLUS calyx. A four-leaved calyx. Consisting of four distinct leaves, or leaflets, as Linneus calls them. Exemplified in *Sagina*, *Epimedium*, and the class *Tetradynamia*.

TETRASPERMA planta. A four-seeded plant. Producing four seeds in each flower: as in the *Asperifoliæ* and *Verticillatæ*.

TEX-

TEXTURA *vegetabilium*. The texture of vegetables: consists of *Vasa succosa*; succiferous vessels: *Tracheæ aëriæ*. Tracheæ or air vessels: and *Utriculi secretorii*; Utricles, or secretory vessels. See *Vessels*.

THALAMUS. See *Receptaculum*.

THECA. See *Aril*.

THORN or Spine. *Spina*. A sharp process from the woody part of a plant, for its defence; as in *Prunus*, *Cratægus*, &c. See *Prickle*. It commonly disappears by culture; as in *Pear*, *Orange*, &c.

A Thorn may be either—*Terminating*; placed at the end of a branch or leaf: or *Axillary*; proceeding from the angle formed by a branch or leaf with the stem.

Foliary, or growing on the leaf.

Calycine, or growing on the calyx.

Simple or *Single*—*Divided* or *Branched*.

Aloe has thorns at the edges of the leaves.

Thistle has them on the calyx.

Many fruits are protected by them: as *Trapa*, *Tribulus*, *Spinacia*, *Datura*, &c.

THORNY. *Spinosus*. Set with thorns: as the stem of many strubs.—A Thorny leaf. *Folium spinosum*. Running out at the edge into hard, stiff, sharp points. Opposed to *Inerme*.—Sometimes a petiole, stipule, or bracte, becomes hard and sharp: it is then said to be *Spinescens*, Spinescent, or to become thorny.—This, though a very different idea, has been sometimes confounded with *Spinosus*.

Thread. Dr. Withering's term for the Filament.

Thread-shaped. See *Filiform*.

THREE-CAPSULED Pericarp. *Tricapfulare Pericarpium*. Having three capsules succeeding to each flower; as in *Veratrum*, *Delphinium*.

THREE-CELLED Pericarp. *Triloculare Pericarpium*. Divided into three cells within: as *Lilium*.

THREE-CLEFT. *Trifidus*. Divided into three parts by linear sinuses with straight margins.—Applied to the Leaf in *Reseda lutea*—to the Calyx in *Alisma*, *Cliffortia*—to
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the Nectary in *Nigella*—to the Stigma in *Amaryllis formosissima*—to the Cirrus, &c.

Three-cleft-palmate leaf. *Folium trifido-palmatum.* A Palmate leaf with only three divisions.

THREE-CORNERED or **Three-edged.** *Trigonus.* A species of the *Anceps* or ancipital stem, according to Linneus; who says, *Anceps angulos duos oppositos habet.*—*Caulis trigonus* therefore should have three opposite angles, which is impossible.—This term is explained by Berkenhout to be three-sided, with the sides either concave or convex—by Withering, as having three angles, and the sides not flat—by the Lichfield Society, as having three prominent longitudinal angles; which agrees nearly with the explanation in *Term. Bot.*—hollowed longitudinally with three angles: See *Three-sided.*

THREE-FLOWERED Peduncle. *Triflorus Pedunculus.* Bearing three flowers together.

Three-fold leaves. See *Terna.*

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THREE-LEAVED calyx. *Triphyllus*. Consisting of three distinct leaflets: as in *Tradescantia*.

THREE-LOBED leaf. *Folium trilobum*. Divided to the middle into three parts, standing wide from each other, and having convex margins: as in *Leonurus Cardiaca*, *Reseda odorata*.

THREE-NERVED leaf. *Folium trinervium*. Having three distinct vessels or nerves running longitudinally without branching.

THREE-PARTED leaf. *Folium tripartitum*. Divided into three parts down to the base, but not entirely separate; as in *Eryngium campestre*.—Applied also to the Cyme.

THREE-PETALLED or *Tripetalous* corolla. *Tripetala*. Consisting of three distinct petals; as in *Alisma*, *Sagittaria*.

THREE-SEEDED capsule. *Trisperma*. Containing three seeds: as in *Euphorbia*. Applied also to the Berry.

THREE-SIDED stem. *Triqueter caulis*. Having
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ing three *plane* sides: as in *Viola tricolor*.—
Culm, in *Carex*.—Leaf, in *Anthericum ossifragum*. Applied also to the scape, petiole, peduncle, and pericarp.

THREE-VALVED pericarp. *Trivalve pericarpium*. Opening with three valves: as in *Viola*, *Polemonium*, *Cistus Helianthemum*.

Throat. See *Faux*.

THYRSUS Θυρσος, from θυω, *impetu feror, erumpo*, to burst forth. Put for branches, or the flame of a lamp or torch; which have a conical form. Hence the spear with ivy bound about the head, carried in sacrifices to Bacchus, was named *Thyrsus*). A *Thyrse*. Linneus puts it for a species of inflorescence; and explains it to be, a panicle contracted into an ovate form, as in *Syringa* and *Petasites*. Our gardeners have corrupted this term into *Truss*.

Tip. Dr. Withering's name for the Anther. See *Apex*.

TOMENTOSUS (*Tomentum*, down, nap, cotton, or flocks, from τεμνω; or, as others

think, from *tumeo*, to swell up; being used to stuff pillows, bolsters, &c. It is properly the short wool that is not carded and spun; and was applied to the nap on the leaves of some plants, which was used for the same purpose. Hence *Gnaphalium* from γναφαλον, which has the same signification). Tomentose; or, if we must translate the term—Downy, Nappy, Cottony, or Flocky. It is applied to the stem and leaf, when they are covered with hairs so interwoven as scarcely to be discernible: and is a species of pubescence. It is generally white, as on sea plants, and such as grow in exposed situations. Exemplified also in *Cerastium tomentosum*, *Origanum Onites*, *Althæa officinalis*, *Cistus incanus*.

TONGUE-SHAPED leaf. *Folium linguiforme*.
Linear and fleshy, blunt at the end, convex underneath, and having usually a cartilaginous border: as in some *Aloes*, *Mesembryanthemum linguiforme*, *Hæmanthus coccineus*.

Toothed. See *Dentatum*.

Toothed

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Toothed a little, or somewhat toothed. *Subdentatus*. Having very few teeth.

Toothletted. *Denticulatus*. Having very small teeth.

Tooth-ferrate. *Dentato-ferratus*.

Tooth-spined. *Dentato-spinosus*: as in *Agave*.

Top-shaped. See *Turbinatum*.

Torn. See *Lacera*.

TOROSUS. Torose, protuberant, swelling out in knobs; like the veins and muscles. Applied to some filiques; and other pericarps, as *Lycopersicum*, *Phytolacca*.

Torulōsus. Swelling a little.

Torsio (*Torqueo*, to twist). *Directio plantæ in unam alteramve plagam a verticali diversam*.—Delin. Pl. See *Intorsio*.

TORTILIS, *Tortuosus*, *Tortus*. Twisted, or twisting.—*Tortilis arista*. A twisted awn. *Flexa funis instar*. Coiled like a rope.—

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Tortuosum folium. A twisted leaf: as in *Narcissus major*.—*Torta* or *Contorta* corolla. A twisted corolla: as in *Nerium*, *Asclepias*, *Vinca*.—*Tortum legumen.* A twisted legume. When the apex is not in the same line with the base.

TRACHEÆ. Air-vessels. *Vasa aërem attrahentia.* Philos. Bot.—*Canales spirales aëri recipiendo & distribuendo nati.* Regn. Veg. Spiral channels in vegetables for receiving and distributing air. See *Vessels*.

Trailing. See *Procumbens*.

TRANSVERSUM dissepimentum. A Transverse partition. The same with *Contrarium*. At right angles with the valves of the pericarp, in the silique. Opposed to *Parallel*. See *Partition*.

TRAPEZIFORME folium. A leaf having the shape of a *trapezium*, or plane figure with four unequal sides.

TREE. *Arbor.* A Vegetable with a single woody trunk.—Trees (in Linneus's *Regnum*

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num Vegetabile) occupy the fifth tribe, division, or cast of the Vegetable kingdom.—In the Artificial System they are incorporated with herbs that have the same character of the fructification. Ray and Tournefort kept them separate, but Rivinus had united them before Linneus.

TRIANDRIA (*τρεις, three, and ανηρ a husband*). The name of the third class in the Linnean System, comprehending those plants which bear hermaphrodite flowers with *three* stamens.—The second order *Digynia* contains most of the Grasses.

TRIANGULARIS caulis. A triangular stem. *Ex numero angulorum prominentium.* A stem is called Triangular, Quadrangular, &c. from the number of prominent angles. In these terms respect is had only to the number of angles.—*Trigonus, Tetragonus,* &c. are variations of the *caulis anceps*, in which the angles are sharp, and the sides not flat.—*Triqueter* must have three flat sides.

Triangulare folium. A triangular leaf. *Cum tres anguli prominentes ambiunt discum.*

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This seems to me an inaccurate expression; for how angles can surround a disk I do not understand. I apprehend Linneus to mean no more, than that every leaf having three angles in the circumference, is a Triangular leaf, whatever its form may be in other respects.

TRIBUS *vegetabilium*. Tribes of vegetables, are reckoned to be three, in *Regn. Veg.*

1. *Monocotyledones*, containing Palms, Corn, and Grasses, Liliaceous plants; the three first *Gentes* or Nations.
2. *Dicotyledones*, comprising Herbs and Trees; the fourth and fifth Nations.
3. *Acotyledones*, or Cryptogamia: the Ferns, Mosses, Algas, and Funguses; which are the four last Nations.

TRICHOTOMUS *caulis*. A Trichotomous stem. Dividing by threes.—*Pedunculus*, as in *Marjoram*.

TRICOCCA *capsula*. A Tricoccous or three-grained capsule. Swelling out in three protuberancies, internally divided into three cells,

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cells, with one seed in each: as in *Euphorbia*. Hence

TRICOCCEÆ, the name of the forty-seventh order in Linneus's Fragments, and of the thirty-eighth in his Natural Orders.

TRICUSPIDATUM *stamen*. A three-cusped or three-pointed stamen: as in some species of *Allium*. See *Cuspidatum*.

TRIFIDUS. See *Three-cleft*, *Cleft*, and *Fissum*.

TRIFLORUS *pedunculus*. A three-flowered peduncle. Bearing three flowers.

TRIGLOCHIS. See *Glochis*.

TRIGONUS. See *Three-cornered* and *Triangularis*.

TRIGYNIA (*τρεῖς*, and *γυνή* a wife). The name of the third order in the first thirteen classes of the Linnean System, except the first, fourth, and seventh; including those plants which have three pistils to each flower.

TRIHILATÆ (Three-scarred, see *Hilum*).
The name of the fiftieth order in Linneus's

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neus's Fragments; and of the twenty-third in his Natural Orders.

TRIUGUM *folium*. A Trijugous leaf. A pinnate leaf with three pairs of leaflets.

TRILOBUM *folium*. See *Three-lobed*.

TRILOCULARE *pericarpium*. See *Three-celled*.

TRINERVE *folium*. A three-nerved leaf. Having three nerves or unbranched vessels meeting *in* the base of the leaf.

Trinervatum. Having them meeting *behind* or *beyond* (ponè) the base.

Triplinerve. In which they meet *above* (supra) or short of the base.

I must confess that I do not see how these terms are expressive of such distinctions; which are given in *Term. Bot.*—I should have conceived that by the last of them we were to understand, a leaf having three-fold nerves, or running three and three together: and thus Dr. Berkenhout has explained it.

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TRIÆCIA (τρεῖς, and οἶκος *a house*). The name of the third order in the class *Polygamia*; and signifying that there are hermaphrodite, male and female flowers of the same species on three distinct individuals.

TRIPARTITUS. See *Three-parted*.

TRIPETALA corolla. See *Three-petalled*.
Hence

Tripetalodeæ. The name of the sixth order in Linneus's Fragments; and of the fifth in his Natural Orders.

TRIPHYLLUS calyx. See *Three-leaved*.

TRIPINNATUM folium. A Tripinnate, or three times pinnate leaf. A species of Superdecompound leaf; when a petiole has bipinnate leaves ranged on each side of it: as in common Fern, *Pteris aquilina*.

Triplinerve. See under *Trinerve*.

Triply Compound. See *Supradecompositum*.

TRIQUETER f. *Triquetrus caulis*—*latera tria plana obtinet.* See *Three-sided*.

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TRISPERMA *capsula, bacca.* See *Three-seeded.*

TRITERNATUM *folium.* A Triternate, or triply-three-fold leaf. A species of Super-decompound leaf, when a petiole has three biternate leaves.—*Cum petiolus affigit tria foliola biternata.*

TRIVALVE *pericarpium.* See *Three-valved.*

TRIVIALIA nomina. Trivial names. The common or vulgar names for the species of plants, which added to the name of the genus, form a complete denomination of the species. These were invented by Linneus, and first used in the *Pan Suecus*; afterwards in the *Species Plantarum*, and thenceforward in all his other works. Antecedent to this, what we now call the *Diagnosis* or *Specific character* seems to have been considered as the *Specific name*, which see.

TROPICI Solares flores. Tropical Solar flowers. *Mane aperiuntur, & ante vespeream excluduntur quotidie, sed hora explicationis adscendit vel descendit, uti dies adcrecit aut decrecit; adeoque observant horas Turcicas s. inæquales.* See *Vigiliæ.*

TRUN-

TRUNCATUM *folium*. A Truncate leaf.—
Quod linea transversali desinit. Ending in
 a transverse line—so that it seems as if the
 tip of the leaf had been cut off. The
Tulip-tree is a remarkable instance of this:
 This term is applied also to the Petal—
 and to the Nectary, in *Narcissus Tazetta*.

TRUNCUS. Anciently and in common
 English, *Trunk* is put for the stem, body,
 stock, or bole of a tree: for which Lin-
 neus uses the word *Caudex*. He applies
Truncus to the stem or main body of vege-
 tables in general; and explains it to be
 —that which produces the leaves and
 fructification; or the organ multiplying
 the plant. The stem or trunk of herbs he
 names *Caulis*. When it elevates the fruc-
 tification, and not the leaves, he calls it
Scapus, Scape or Shaft. The stem of
 Corn and Grasses, having a peculiar struc-
 ture, he names *Culmus*, Culm or Straw.
Stipes is the base of a Frond; or a stem
 passing into leaves, or not distinct from
 the leaves. See *Stem*.

Tuber. A knob, in roots. *Solidus parti-
 culis indiscretis*. Solid, with the compo-
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nent particles all similar.—It is also the Latin name for the *Truffle*.

TUBERCULUM (dimin. from *Tuber*). A little knob, like a pimple.—*Fructificatio constans punctis scabris ex pulvere quasi congestis*. A little knob, or rough point, on the leaves of some *Lichens*, supposed to be the fructification.—Hence such are said to be Tubercled, *Tuberculati*.

TUBEROSA radix. A Tuberous or knobbed root. *E partibus carnosis filo basi connexis constans—f. subrotundus corporibus in fasciculum collectis*.—Consisting of roundish fleshy bodies, or Tubers, connected into a bunch by intervening threads. As in *Pæonia*, *Hemerocallis*, *Filipendula*, *Jerusalem Artichoke*, *Potatoe*.

TUBULATUS calyx. A tubular calyx. Running into the form of a tube.—Applied to the Corolla, in the class *Didynamia*—and to the Nectary of *Hellebore*.

TUBULOSUS flos. A Tubulous compound flower, composed wholly of Tubulous florets. The same with *Flosculosus flos* of
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Tournefort. Exemplified in *Tansley*, and other naked discous flowers.—*Tubulosus flosculus*. A tubulous floret. Having a bell-shaped border, with five reflex segments, rising from a tube. These are the regular-shaped little component flowers in the disk of Compound flowers: as in the *Sun-flower*, *Daisy*, &c.—*Tubulosus caulis*. A hollow stem.—*Tubulosum folium*. A hollow leaf: as in *Onion*.

TUBUS. A Tube or hollow pipe. Put for the lower, narrow, hollow part of a monopetalous or one-petalled corolla, by which it is fixed into the receptacle. Vaillant and Haller call the style *Tuba*, from its resemblance to a trumpet.

TUNICATUS *bulbus*. A tunicated or coated bulb. *Tunicis numerosis constans*. Composed of numerous concentric coats; as the *Onion*.—*Tunicatus caulis*. A tunicated stem. *Membranis vestitus*. Clothed with membranes.

TURBINATUM (*Turbo*, a top). Turbinate, or top-shaped. Dr. Withering translates it Turban-shaped, which must surely be a
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mistake.

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mistake. *Basi angustatum*. Philos. Bot.—*Obverse conicum*. Delim Pl.—Narrowed at the base, or inversely conical. Shaped like a boy's top, or a pear. Applied commonly to the Germ and Pericarp.—Also to the Perianth, as in *Grislea*, *Memecylon*—and to the Nectary, in *Narcissus Bulbocodium*.

TURGIDUM *legumen*. A Turgid or swollen legume or pod: as in *Ononis*.—Thought by some to be the same with *Inflatum*; but in the latter I apprehend the pericarp to be in substance as well as form somewhat like a blown bladder; whereas in the former it is merely more swelled out, and has a wider cavity than is usual.

TURIO (q. *terio*, *quia facile teratur*; as *turgurium*, q. *tegurium* from *tego*, or q. *tenerio* from *tener*.—How Dr. Berkenhout came to derive it from *Tyro*, a novice, I am at a loss to conceive). This word is used by Columella for the extreme twig or young shoot of a tree. I do not find it in *Philos. Bot.*—*Termini Botanici*—or *Delim. Pl.*—Giseke makes it synonymous with *Stolo*.—Dr. Berkenhout says it is the
Gemma

Gemma so called, by Ludwig, when proceeding from the root.—Ray, whose ideas and expressions are ever classical, says: *Tenella arborum, fruticum aut herbarum cacumina, quasi teneriones*; vel, ut Vossius vult, *quia facile teruntur*.—Leers explains *Turiones* to be—*tenellæ plantarum soboles, verno tempore cum foliis e terra erumpentes: ut Asparagus, Humulus*. The tender shoots of plants which come up in the spring; as in the Asparagus and Hop. Such are called *Asparagi*; the tender sprouts or shoots of any herb from the ground. Ray thus explains the word Asparagus:—*dicitur primum germen herbarum quod edendo est vel oleris cujusque turio antequam in folia explicatur, a σπειρω*.

TWIN anther. *Didyma anthera*. Swelling out into two protuberancies: as in *Ranunculus, Mercurialis*.—Applied also to Germ and Pericarp; as in *Veronica*.

TWINING stem. *Caulis Volubilis*. Ascending spirally round a branch, stem, or prop. This is done either from right to left, contrary to the sun's apparent motion, as

in *Hops*, *Honeysuckle*, *Black Bryony*, &c. or from left to right, with the sun, as in *Convolvulus*, *Basella*, *Phaseolus*, *Cynanche*, *Euphorbia*, *Eupatorium*.

In order to understand this, we must conceive the spectator to stand with his face towards the south, when of course the east will be towards his left hand. Thus stationed, if he observes a stalk of *Convolvulus* or *Kidney Bean*, he will see that it twines from the left or east, by the south, towards the west; and that a *Honeysuckle* or *Hop* takes a contrary direction.—Who will reveal the cause of this difference?

TWISTED. See *Tortilis*. If we are to make any difference between this and *Coiled*, I should conceive the deviation of the latter to be in the same plane, and that of the former to be in different planes.

Two-capsuled. See *Bicapsular*.

Two-celled. See *Bilocular*. This term however is to be preferred to that; since we use the word *Cell* in English.

Two-

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Two-cleft, or Bifid. See *Cleft*.—*Utricularia* is an instance of the two-cleft perianth.

Two-edged or Ancipital, See *Anceps*.

Two-faced leaves. See *Bifarious*.

Two-flowered peduncle. *Pedunculus biflorus*. Proceeding simple from the stem or branch, but bearing two flowers at the end.

Two-fold leaves. *Bina folia*. Two and two together, from the same place, or at the same joint. See *Bina* and *Binate*.

Two-forked. See *Dichotomous*.

Two-horned. See *Bicornes*.

Two-leaved calyx. *Diphyllus*. As *Papaver*, *Fumaria*. Applied to the Tendril—and to the Peduncle in *Gomphrena*.

Two-lipped corolla. *Bilabiata*. As in *Pinguicula*, and most flowers of the *Didynamia* class.

Two-lobed leaf. *Bilobum folium*. See *lobatum*.

Two-parted leaf, perianth. *Bipartitum folium, perianthium*. Divided in two down to the base.

Two-petalled corolla. *Dipetala*. As in *Circæa, Commelina*.

Two-ranked or Two-rowed. See *Distichus*.

Two-seeded fruit. *Dispermus fructus*. Containing two seeds.—*Disperma planta*. Having two seeds to each flower: as in Umbellate and Stellate plants.

Two-valved pericarp. *Bivalve pericarpium*. As in *Chelidonium*, and all Siliques and Legumes.—Two-valved glume. *Gluma Bivalvis*: as in the calyx and corolla of most Grasses.

V

VAGINA. A Sheath, or membrane investing a stem. Hence

VAGINALES. The name of the twenty-seventh order in Linneus's Fragments of a Natural Method in his *Philosophia Botanica*.

VAGINANS *folium*. A Sheathing leaf. See *Sheathing*.

VAGINATUS *caulis*. A Sheathed stem. See *Sheathed*.

VALVA f. VALVULA. A Valve, Valvelet, or Valvule. But there seems to be no occasion to use the diminutives in English; for Linneus makes no distinction between *valva* and *valvula*. He uses *valvula capsulæ*, and *valva glumæ*; but more frequently the diminutive.—*Valvula—paries quo fructus tegitur externe*. The outer coat, shell or covering of a capsule or other pericarp; or the several pieces which compose it. There seems to be an impropri-

ety in explaining *valvula* by *paries* : it is rather the door or opening by which the seeds are to go out or escape. If a pericarp is entire, it is said to be *univalve*, or to consist of one valve. If it is divided, according to the number of pieces or divisions, it is called *bivalve* or two-valved; *trivalve* or three-valved, &c.

The leaflets composing the calyx and corolla in Grasses are also named *Valves* : as are also the substances or scales which close the tube in some flowers : as in *Borage* and other *Asperifoliæ*.

Valvatum petalum. A valved petal. Resembling the glume in Grasses.

VARIETAS. A Variety. *Est planta mutata a causa accidentali.*—*Varietates tot sunt, quot differentes plantæ ex ejusdem speciei semine sunt productæ.*—*Species varietatum sunt, Magnitudo, Plenitudo, Crispatio, Color, Sapor, Odor.*—*Philos. Bot.*—A plant changed by some accidental cause. There are as many Varieties as there are different plants produced from the seed of
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the same species.—Varieties are *Size, Fulness, Curling, Colour, Taste, and Smell.*

In *Delin. Pl.* it is expressed more fully; thus—*Variation* is a change in some less essential part or quality; as colour, size, pubescence, or age.—Externally; by the plaiting or interweaving of the branches—by bundling or uniting of several stalks into one broad flat one—by the greater breadth, or narrowness, or curling of leaves—by becoming awnless, or smooth, or hirsute.

Internally; by becoming mutilated in the corolla; or having one larger than ordinary—by luxuriance, multiplication, or fulness—by becoming proliferous, or crested—by bearing bulbs instead of seeds—or by being viviparous.

The usual causes of Variation are, Climate, Soil, Exposure, Heat, Cold, Winds, Culture.

VASA. Vessels.—*Constant Vegetabilia triplicibus Vasis.* 1. *Succosa liquorem vehunt.*
2. *Utriculi alveolis succum conservant.*
3. *Tracheæ aërem attrahunt.* Philof Bot.

In

In *Regn. Veg.* it stands thus—

Vasa canales succis per eos promovendis repleti, plerumque recti.

Tracheæ canales spirales aëri recipiendo & distribuendo nati.

Utriculi sacculi pulpa ut plurimum viridi pleni, vasorum interstitia explentes.

Here *Vasa* is put for the Succiferous vessels only. See *Vessels*.

VAULTED. *Fornicatus.* Arched like the roof of the mouth: as the upper lip of many Ringent flowers; in *Aconite*, &c.

VEGETABILE. A Vegetable.—*Vita composita, absque motu voluntario.* *Regn. Veg.*
—Compound life, without voluntary motion.—Otherwise defined to be—an Organical body, which draws in its nourishment by pores or vessels on its outer surface.—Or, an Organical body destitute of sense and *spontaneous* motion, adhering to some other body in such a manner as to draw from it nourishment, and having the power of propagating itself by seed.

The

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The primary parts of a Vegetable are—

1. The Root.
2. The Herb.
3. The Fructification.

Vegetable Kingdom. The second of the three great divisions of natural bodies, comprehending all those substances which are organized and have life, but are destitute of sense and spontaneous motion. Linneus distributes vegetables into three Tribes, seven Families, or nine Nations. In his Artificial System he arranges them in twenty-five classes. He has also made an essay to reduce them into Natural Orders.

Vegetable Substance. See *Substantia*.

Vegetable Texture. See *Textura*.

Veil. See *Calyptra*.

VENOSUM folium. A Veined leaf. Having the vessels branching, or variously divided, over the surface.

When it has no veins, at least none that are perceptible to the naked eye, it is called *Folium Avenium*, a veinless leaf.

VEN-

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VENTRICOSUS. Ventricose. Belled. Distended. Swelling out in the middle. *Ventricosa spica: à lateribus gibba.* Swelling out at the sides.—Applied to the Perianth, in *Æsculus*—and to the Corolla, in *Digitalis*.

Ventriculosus. Swelling out a little: as the perianth of *Salicornia*.

VERECULÆ (from *Vepres*, a brier). The name of the fifty-fourth order in Linneus's Fragments, and of the thirty-first in his Natural Orders.

VERNATIO (from *Ver*, the Spring). See *Foliatio*, which is the term in *Philos. Bot.* for which this is substituted in *Term. Bot.* and *Delin. Pl.*—In the two latter *Reclination* is omitted, and there is some difference in the explanations.

VERRUCOSA capsula. A warted capsule. Having little knobs or warts on the surface. As in *Euphorbia verrucosa*—*Verrucosum folium.* A Warted leaf. *Tectum punctis carnosis.* Covered with fleshy points. The same with *Papillosum*.

VER-

VERSATILIS (*Verlo*, to turn) *anthera*. A

Verfatile anther. Dr. Withering translates it Vane-like. *Quæ latere affigitur*.

Which is placed on the filament by its side. Opposed to *Erecta*, Upright, which is fixed by its base. *Philos. Bot.*—In

Delin. Pl.—it is explained more fully thus —*Parte sui affixa, ceterum libere mobilis*.

Fixed by some part, but freely moveable.

It is there made synonymous with *Incumbens*. See *Incumbent*.—Exemplified in *Vitex*, *Linnæa*, *Geranium*.

VERTICALE *folium*. A Vertical leaf.—In

Philos. Bot. the same with *Obversum*,

which see.—A vertically-ovate leaf

is the same with an obversely ovate

or obovate leaf; and a vertically-cordate

leaf is the same with an obversely-cordate

or obcordate leaf.—Here the form of

leaves is considered, and it seems as if the

base and apex had changed places.

In *Delin. Pl.* the term *Verticale* appears in that section which sets forth the *Direction* of leaves; and since it is placed next after *Horizontale*, we are led to suppose that it is used in opposition to that term;

but

but the words of the explanation will not admit of that sense; nor have they any thing to do with the direction of a leaf. I conclude therefore that the term is misplaced.—The words are these, *Obversum, ut regio basis angustior evadat regione apicis*. A Vertical leaf is Obverse, so that the region of the base becomes narrower than the region of the tip; which is nearly the same with Linneus's explanation of *obversum*.

After all, I do not see what the term *Vertical* can have to do with the shape of a leaf; and if it had presented itself to me in company with *Horizontal*, I should have supposed that the latter term implied a position of the leaf's surface parallel to the horizon: and the former perpendicular to it.

VERTICILLUS (f. *Verticulus*, à *verto*. Instru-
mentum quod fuso adhibetur, ut facilius
vertatur. *Plinius*). Anglicè *Wherles*
dicimus, says Ray. It is commonly writ-
ten *Whorl*; but *Whirl* seems to be the pro-
per orthography, since it must be derived
from the verb *to Whirl*, which signifies to
turn round rapidly. A learned friend
suggests,

suggests, that it may be derived from *Orle*, a term in heraldry for the bordure surrounding a shield. If so, it should be spelt *Whorl*.

Linneus puts this term for a sort of inflorescence made up of many subsessile flowers surrounding the stem in a ring. *Fit ex floribus numerosis subsessilibus, caulem annulatim ambientibus*.—As in *Mentha Pulegium*, *Marrubium*, &c.

A Verticil, Whorl or Whirl, may be

1. Sessile or peduncled.
2. Naked; that is, without involucre, bracte or bristle. Bracted—or Involucred.
3. Crowded. Distant—or Remote.—
Hence

Verticillati flores. Verticillate flowers; or flowers growing in a Whorl; or round the stem in rings one above another at each joint.—It is applied to peduncles; and sometimes to branches and leaves.—Plants bearing flowers in this manner are styled

Verticillatæ. Verticillate plants. These are
included

included in the fifty-eighth order of Linneus's Fragments; and the forty-second of his Natural Orders. In the Artificial System, they form the order *Gymnospermia* of the class *Didynamia*. They also constitute one of Ray's classes.

VESICULARIS (*Vesicula*, a little bladder) *Scabrities*. Vesicular or bladdery-ruggedness. Having little glands like bladders on the surface: as on the leaves of *Mesembryanthemum*, *Aizoon*, *Tetragonia*, &c.—It is applied also in common language, to the pulp of the *Orange*, *Lemon*, &c.

VESSELS. *Vasa*—are, 1. *Succiferous* or *Sap vessels*. Canals commonly straight, and of a very small bore, for conveying the liquor, juices, or sap of the vegetable. These are called *Vasa* (κατ' ἐξοχην) in *Delin. Pl.*

2. *Utricles*, or little Bags; usually full of a green pulp, filling up the interstices of the vessels, and serving as reservoirs wherein the sap is lodged and perhaps secreted.

3. *Air vessels*. *Tracheæ*. Spiral Canals,
usually

usually of a larger bore, for receiving and distributing the air.

On this subject see the learned Grew's incomparable treatise on the *Anatomy of Vegetables*.

VEXILLUM. Standard or Banner. *Petalum corollæ papilionacæ superius adscendens; alis carinæque incumbens.*

VIGILIÆ plantarum s. florum. *Status floris aperti.* The state of the open flower.—*Absolvuntur determinatis horis diei, quibus plantæ flores quotidie aperiunt, expandunt & claudunt.* These *Vigiliæ* or Watchings are performed at determined hours of the day, when plants open, expand, and shut their flowers daily.

Linneus calls those flowers which observe this stated rule of opening and shutting, *Solar flowers*; and divides them into three kinds.—

1. *Meteorici.* Opening and shutting sooner or later, according to the temperature of the air.

2. *Tropici*, or Tropical Solar flowers. Opening and shutting sooner or later as the days increase or decrease; and therefore observing the unequal or Turkish hours.

3. *Æquinoctiales*, or Equinoctial Solar flowers. Opening, and usually shutting at certain determinate hours of the day; and therefore observing equal or European hours.

Linneus has given a table of these, with some observations, in *Philos. Bot.* p. 273.

VILLOSUS. Villose: *Pilis mollibus pubescens*. Pubescent or covered with soft hairs. As the stem in *Tomex* and *Rhus*. The leaf in *Ulex europæus* or Furze, *Primula villosa*, &c. The stigma.

VILLUS (from *μαλλος*—or *a velando*—or *a vellendo*—or from *ιλλω* for *ιελω*—or from *pilus*—or from *vinnus*, cincinnus molliter flexus—such is the uncertainty of derivation). It is interpreted—*pili collecti, ac flocci vestium*; collected hairs, the pile or nap of cloth.—In Linneus's idea, it seems to

to be soft close hairs, forming a fine nap or pile like velvet.

VIMEN (*a viendo*, from binding) *Virgultum lentum ac flexile, ad ligandum aptum.*
A bending Twig or Wythe: slender and flexible, fit for binding.

VINACEUM. Granum acine, γ·γαφ·ιον. A Grape-stone. *Viol shaped.* See *Panduræforme*.

VIRGATUS (*Virga* a rod, or wand) *caulis.*
A rod-like or wand like stem or branch.
—*Ramusculis debilibus in æqualibus.* Shooting forth slender weak unequal rods or twigs: as in *Artemisia campestris*.

VIRGULTUM (q. *Virguletum*, a *Virgula*, dimin. a *virga*). Small twigs or Brushwood. Otherwise called *Cremium*, a *cremando*, from burning.

VISCIDUM (*Viscum* f. *Viscus*, Birdlime: from Β·ισκος *Æol.* pro ἰξος) *folium.* A Viscid or clammy leaf. *Humore non fluido sed tenaci oblinitum.* Covered or besmeared with a tenacious juice: as in *Senecio viscosus*. Applied also to the Stem.

VISCOSITAS. Viscidity or Clamminess. The quality of tenacious moisture.

VIVIPARA *planta.* *Viviparus caulis* A Viviparous plant or stem. Producing its offspring alive: either by bulbs instead of seeds; or by the seeds themselves germinating on the plant, instead of falling as they usually do.—Exemplified in some sorts of *Allium*, in *Polygonum viviparum*, and several of the *Grasses*.

UMBELLA. An Umbel. Withering translates it the Rundle. *Receptaculum ex centro eodem elongatum in pedunculos filiformes proportionatos.* A receptacle stretching out into filiform proportioned peduncles from the same centre. See *Carymb.*—It is

1. Simple or undivided; as in *Panax*.
2. Compound: each peduncle bearing another little umbel, umbellet, or umbellule.—The first or larger set of rays constituting the *universal* or *general* umbel; the second or subordinate set constituting the *partial* umbel. Dr. Withering puts Spokes for what Linneus calls Radii.

3. Pro-

U M

3. Proliferous or superdecompound.

An Umbel also is

1. Concave. 2. Convex. 3. Fastigiate,
or rising gradually like the roof of a
house.

It is also either

1. Erect; or, 2. Nodding.

Flowers growing in this manner are
called *Umbellati*, Umbellate or Umbelled
flowers; by old authors *Umbelliferous*.
Hence

UMBELLATÆ. The name of the twenty-
second order in Linneus's Fragments;
and of the forty-fifth in his Natural Or-
ders. Included in the second order of
the fifth class, in the Artificial System.
This order is called by Ray and others
Umbelliferæ; by Cæsalpinus *Ferulaceæ*.

UMBELLULA. An Umbellule or Umbellet.
The same with the Partial umbel. Rund-
let of Withering.

UMBILICUS. The Navel. Used for the
cavity at the end of some fruits opposite
to

to the footstalk. It is the place of the receptacle in superior flowers, and is commonly surrounded by the remains of the calyx: as in *Pyrus*.

It is sometimes applied to the centre of a corolla; as in *Browallia*.

Umbilicatus flos, fructus. An umbilicate flower or fruit. Formed in the middle like a navel.

UNANGULATUS caulis. A stem of one angle: as in *Iris fœtidissima*.

UNARMED. Inermis. Without thorns or prickles. Applied to the stem, leaf, and calyx.

UNCINATUS. Uncinate. Hooked at the end. As the awn of the seed in *Geum urbanum*; and the stigma in *Viola*, *Lantana*, &c. This term is used, but not explained by Linneus. In what it differs from *hamosus* I know not.

UNDATUS, Undulatus. Waved. The surface rising and falling in waves, or obtusely; not in angles.—Applied to the leaf
in

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in *Potamogeton crispum*; and to the corolla, in *Gloriosa*.

Linneus, in *Philos. Bot.* has only the second of these terms, which he applies to a leaf thus—*folium undulatum fit, cum discus versus marginem convexe adscendit & descendit*.—In *Term. Bot.* we meet only with the first, thus explained—*disco plicis obtusis alternatim flexo*.—In *Delin. Pl.* both terms occur. But I do not apprehend that they are used in different senses any more than *patens* and *patula*, *valva* and *valvula*, &c.

UNDERSHRUB. See *Suffrutex*.

UNEQUAL. *Inæqualis*. The parts not corresponding in size, but in proportion only. Applied to the corolla; and to the florets in many of the *Umbellatæ*.

UNGUICULARIS *mensura* f. *Unguis*. A measure of six lines, or half a French inch.

UNGUICULATUM *petalum*. A petal with a claw.

UN-

U N

UNGUIS. See *Measures*.—A Claw. The base of the petal in a polypetalous corolla.

UNGULATA *filicula*. A Hoof-shaped filicle: as in *Rose of Jericho*.

UNICAPSULARE *pericarpium*. A Unicapular pericarp. Having one capsule to each flower.

UNICUS. One only, single. *Unicum folium*. A single leaf on a stem—*Unicus flos*, synonymous with *solitarius* in *Delin. Pl.* *Pedunculus solitarius, qui unicus est in loco.* *Philos. Bot.* See *Single*.

UNIFLORUS *pedunculus*. A one-flowered peduncle.

UNILABIATA *corolla*. A one-lipped corolla, or a corolla of one lip.

UNILATERALIS *racemus*. A one-sided raceme. When the flowers grow only on one side of the common peduncle.

UNILOCULARE *pericarpium*. A unilocular or one-celled pericarp—or of one cell.

UNI-

UNIVALVE *pericarpium*. A univalvular or one-valved pericarp.

UNIVERSALIS *umbella*. A universal, rather general, or primary umbel.—*Universale involucreum*. A Universal involucre. Placed at the foot of the universal umbel.

VOLVA (The Ruffle, *Withering*). The membranaceous calyx of a Fungus.—This is said to be—*Approximating* when it is near the cap. *Remote*, when at a distance.

VOLUBILIS. Twining: which see.

UPRIGHT or Erect. *Erectus*. See *Erect*.

URCEOLATUS. Pitcher-shaped. *Urceoli* f. *pekvis instar inflatus* & *undique gibbus*. Bellying out like a pitcher. Applied to the calyx, corolla, and nectary.

URENS. Stinging, or armed with stings.

UTRICULI (dimin. from *Uter*, a wine bag or bottle). Utricles. Reservoirs to secrete and receive the sap. See *Vessels*.

Also the bags or bladders at the root of *Utricularia*.

W

WAKING or *Watching* of plants. See *Vigiliæ*.

Wand-like or *Rod-like* stem. See *Virgatus*.

Warted. See *Verrucosa*.

Waved. See *Undatus*.

Weapons. See *Arms*.

WEDGE-SHAPED leaf. *Folium cuneiforme*.

Having the longitudinal diameter exceeding the transverse one, and narrowing gradually downwards: as in *Apium graveolens*, *Saxifraga tridactylites*.

WHEEL-SHAPED corolla. *Rotata*. Monopetalous, and expanded flat without any tube.

WHIRL, Wherl, or Whorl. See *Verticillus*.

WINGS. *Alæ*. The two side petals in a papilionaceous corolla.—Also, membranes affixed to the seed.

Winged

Winged petiole. *Alatus.* Having a thin membrane or border on each side; or, dilated on the sides: as in *Orange*.—*Winged leaf.* See *Pinnatum*.

WITHERING or Shrivelling. Decaying without falling off. See *Marcescens*.

WOOD. *Lignum.* The solid part of the trunk, formed gradually from the inner bark of the preceding year, become juiceless, hardened, and agglutinated.

Woody stems. Opposed to herbaceous.

WOOL. *Lana.* A sort of pubescence, or a clothing of dense curling hairs on the surface of some plants.

Woolly. *Lanatus.* Clothed with a pubescence resembling wool: as the leaves of *Horebound*, *Great Mullein*, *Furze*, &c. See *Lanatus*.

Woollyish, or somewhat woolly. *Sublanatus*.

WRINKLED. See *Rugosum*.

WRITHED.

WRITHED. *Contortuplicatus*. Twisted very much. See *Tortilis*.—I perceive this word to be confounded even by respectable writers, in orthography at least, with *Wreathed*, which is of very different import.

WYTHE, or Withe. See *Vimen*.

Z

ZIGZAG, or Ziczac. Used by some English writers for *Flexuose*; which see.

THE END.

